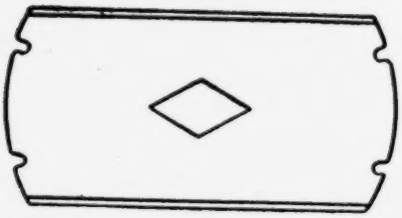
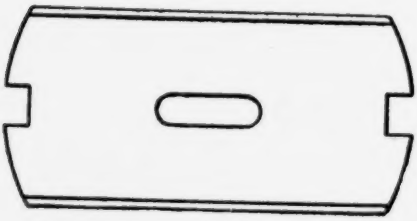
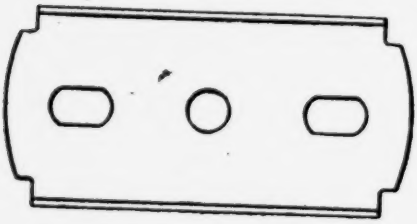


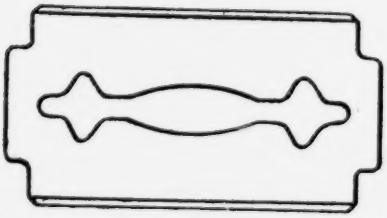
THE GAISMAN BLADE of the patent in suit, filed November 21, 1922.



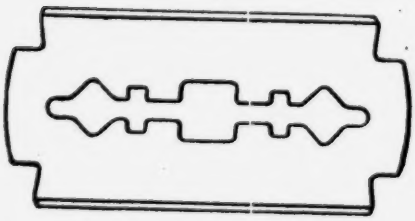
THE HARTMAN BLADE of Hartman Patent No. 1,247,266, November 20, 1917.



THE BALLREICH BLADE of Ballreich Patent No. 1,246,219, November 13, 1917.



PETITIONER'S BLADE which the Court of Appeals for the Third Circuit held to be an infringement.



THE HAWLEY BLADE which the Court of Appeals for the Second Circuit held NOT to be an infringement.

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SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1936

ESSEX RAZOR BLADE CORPORATION
Petitioner

vs.

GILLETTE SAFETY RAZOR COMPANY
Respondent

BRIEF FOR PETITIONER

JURISDICTION AND OPINIONS BELOW

THIS is a patent case, before this Court on a writ of certiorari to the Circuit Court of Appeals for the Third Circuit. The writ was granted May 4, 1936, on petition of defendant below showing conflict between the decision of the Court of Appeals for the Third Circuit, 83 F. (2d) 541 (R., 230), and an earlier decision of the Court of Appeals for the Second Circuit in *Gillette Safety Razor Company* v. *Hawley Hardware Company*, 64 F. (2d) 10,* as to the scope of Patent No. 1,633,739 for a "Safety Razor" granted June 28, 1927 to one Henry J. Gaisman (R., 119). The Court of Appeals for the Third Circuit, reversing the decree of the District Court of New Jersey, 13 F. Supp. 505, held the patent infringed by the manufacture and sale of petitioner's safety razor blade, whereas the

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*A copy of the opinion will be found at page i of the appendix to the brief in support of the petition.

Court of Appeals for the Second Circuit had previously held the patent *not* infringed by the manufacture and sale of substantially the same blade.

STATEMENT OF THE CASE.

The razor of the patent in suit is a double-edged safety razor of the Gillette type. Razors of this type comprise, beside the blade, two plates—the cap (also sometimes called the backing or clamping plate) and the guard—between which the blade is held and flexed, and a screw-threaded handle on which the cap and guard are mounted and by means of which they are drawn together to clamp the blade. In the old, so-called three-post, Gillette razor (Pltf.'s Exh. 6) the cap is provided with three posts or studs—the middle one threaded to engage the handle—which, when the parts are assembled, pass through three holes in the blade and through three like holes in the guard—the essence of simplicity. The blade, cap and guard are thus held in proper relation by means of these posts, and "the blade performs no function in retaining any of said parts with relation one to another", performing rather the single function for which all honest razor blades are designed; to wit, to shave.

In the razor of the patent in suit (Pltf.'s Exh. 7) on the contrary, the blade does something more, and coöperating with both cap and guard, acts as a link or key between them, thereby retaining each "with relation one to another". Thus the patentee states:

> "The object of my invention is to provide a safety razor wherein a blade will cooperate with a guard member to retain the blade in shaving relation thereto and the blade will also cooperate with a backing member to retain the latter in proper relation to the blade for shaving purposes, so that the position of the backing

> member with regard to the guard member is maintained by the blade and not by the cooperation of said members together in the well known manner . . . ." (Patent, p. 1, lines 19, 39; R., 121).

In achieving this object the patentee provided the inner face of his guard with a diamond-shaped projection or stud, centrally located, and the inner face of his cap with pins near its ends, these pins escaping the guard when the parts are assembled. The two end posts of the old Gillette razor cap, extending through the guard, he eliminated. Having thus made his razor, he made his blade to fit it—with a diamond-shaped central opening to receive the diamond-shaped stud on the guard, and with end notches to receive the pins on the cap. In the Gaisman razor, therefore (as can best be seen from the patent drawing itself), the blade is directly located with relation to both cap and guard, and cap and guard are located with relation to each other through the intermediary of the blade.

Why? Why did Gaisman make these changes in the old and really quite satisfactory Gillette razor? What advantage does the shaver get from Gaisman's diamond-studded guard, his diamond-holed blade, his pins, and his notches? The only advantage which the patentee himself claims for these things is the modest advantage of greater convenience in assembling the razor parts—"when the blade is placed upon the guard member said parts will be in proper position to receive the projection 4 of the backing without the *inconvenience* sometimes experienced of having to manipulate the blade to register its holes with spaced holes of the guard, as heretofore known, and when the backing is applied . . . . the parts are *conveniently* retained to receive the handle for clamping the parts together" (Patent, p. 2, lines 64-77; R., 122). The Court of Appeals, however, found other and more impressive advantages. It was Gaisman, said the Court of Appeals,

who first made the "so-called safety razor" safe; adding by way of explanation, "We say 'so-called safety razor' for in point of fact it was not a safety razor. . . . Indeed the statement of the trial judge, 'I generally cut myself', is the experience of all of us safety razor users" (R., 232). That is it *was* the experience of all of us safety razor users until Gaisman "For the first time in the art . . . . produced a safe, non-face-cutting Gillette razor" (R., 244). Gaisman, the humanitarian, builded better than he knew.

Respondent also had its views on the subject. Respondent's production engineer testified that a safety razor is a precision instrument, and that blade exposure—extension of the blade beyond cap and guard—"must not be less than zero [*sic*] nor preferably more than 8/1,000 of an inch" (R., 45). He further testified (R., 44, 45) that in the old-style three-post Gillette razor the blade might shift laterally with reference to the cap, due to manufacturing tolerances (those inaccuracies in fit which can be tolerated, due regard being had for the use and selling price of the instrument), and the cap might shift laterally with reference to the guard for the same reason. If both shifts happened to be maximal and in the same direction, the errors would be cumulative, resulting in a total blade displacement of about 5/1,000 of an inch under those extreme conditions. In the Gaisman razor this double shift cannot take place, said the production engineer, and the blade displacement due to the tolerance factor is therefore reduced to 3/1,000 of an inch—a clear gain of 2/1,000. Hence in the Gaisman razor less variation in blade exposure is possible using the same manufacturing tolerances; or the same variation can be had with greater tolerances and consequent cheapening of the manufacturing process—if one is not so interested in making the so-called safety razor safe.

The record fails to show that any razors, made according to the Gaisman specification, were ever on sale for the convenience and safety of that considerable body of mankind who must, perforce, brave the sanguinary perils of the so-called safety razor so feelingly recounted by Judge Buffington. The nearest approach is respondent's "Goodwill" razor (Pltf.'s Exh. 9) in which the central diamond-shaped stud of the Gaisman razor is replaced by two square projections, one near either end of the guard, and the four pins are replaced by four lugs, one at each corner of the cap. The Gaisman blade with its diamond-shaped central opening and end recesses cannot be used in the Goodwill razor, and the Goodwill blade, shaped to fit the Goodwill razor, is, of necessity, provided with two square openings, one near each end, and four notches, one at each corner. (Comparison drawings of the Gaisman and Goodwill razors and blades are embodied in the opinion of the Court of Appeals and appear also on page 131 of the record.)

Of the eight claims of the Gaisman patent, only two, numbers 1 and 2, are in suit. The subject matter of these two claims is a safety razor *blade*. The patent contains six other claims directed to the razor assembly—the complete razor, consisting of guard, cap and blade in combination—but infringement of those claims is not charged. Hence the only issues involved in this suit are these: is the blade alone patentable independently of the combination and, if so, does the blade made and sold by petitioner infringe? (The patentability of the razor assembly and infringement of the claims drawn to it are *not* in issue, though from a reading of the Court of Appeals' opinion one would imagine that they were; indeed, the distinction between blade and razor, so fundamental in this suit, seems to have been completely overlooked by the Court of Appeals.)

The blade of the patent is a flexible, double-edged blade of the wafer type (so thin as to require external support),

a type in common use since 1904 when Gillette's original patent issued (R., 137). It is shown in Figure 7 of the patent and is here illustrated:

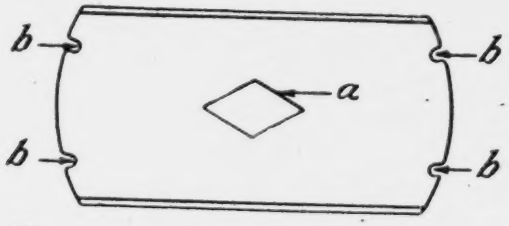

Fig. 1. The Gaisman Blade of the Patent in Suit.

This blade, as defined in claims 1 and 2, has a non-circular, preferably diamond-shaped central opening *a* (designed to retain the blade in shaving relation to the guard), and end notches *b* (designed to cooperate with the clamping member to retain the latter, independently of the guard, in shaving relation to the blade).

Claim 1 reads as follows:

> "1. A blade having a non-circular opening substantially centrally disposed to retain the blade in shaving relation to a guard member, said blade having means spaced from said opening to cooperate with a clamping member to retain the latter in shaving relation to the blade independent of the guard member."

Claim 2 is substantially the same except that the central opening is said to be "angular"—the preferred form.

The blade made and sold by petitioner (Pltf.'s Exhs. 4 and 5) is here illustrated:

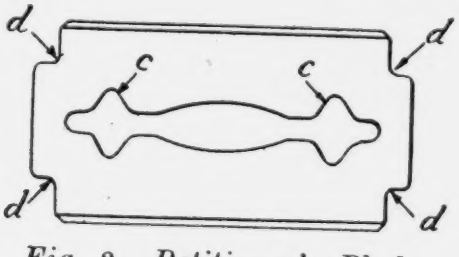

Fig. 2. Petitioner's Blade.

This blade has a long, irregularly-shaped, longitudinal slot having two non-circular enlargements or openings *c*, one near each end, and corner notches *d*. It is notched and slotted in this fashion in order that it may fit the various Gillette-type razors in common use today, including the Goodwill razor. Petitioner's blade differs from the Gaisman blade in having *two* non-circular enlargements or openings, one at each end of a long slot, instead of a single diamond-shaped opening in the center of the blade, and in having notches at its corners instead of in its ends.

The District Court (Judge Clark) held the claims in suit invalid for lack of invention. He said, "I think that the improvement of the blade disclosed by the Gaisman patent is not inventive" (R., 96), and entered a decree dismissing the bill (R., 18). On appeal, the Court of Appeals (opinion by Judge Buffington) reversed the District Court, held the claims valid, and although expressly recognizing the above-noted differences between petitioner's blade and the blade of the patent (R., 243), nevertheless found infringement.

SPECIFICATION OF ERRORS.

The Circuit Court of Appeals for the Third Circuit erred, petitioner believes—

1. In holding claims 1 and 2 of the patent in suit valid.

2. In holding claims 1 and 2 of the patent in suit of such scope as to be infringed by petitioner's blade.

3. In reversing the decree of the District Court dismissing the bill of complaint.

SUMMARY OF ARGUMENT.

It may well be doubted that Gaisman's slight change in the construction of the old and well-known Gillette safety razor, whereby its parts may, conceivably, be assembled with greater convenience, amounts to invention. It may well be doubted that the greater precision in blade setting (or in the alternative, the less rigorous tolerance requirements) which, in the opinion of the Court of Appeals, the patented construction makes possible, are sufficient to raise Gaisman's accomplishment above the level of mechanical skill. But it really doesn't matter. For resolving all doubts in Gaisman's favor and assuming that the Court of Appeals was right when it said that "For the first time in the art it [Gaisman's combination] produced a safe, non-face-cutting Gillette razor", the indubitable fact remains that the patentability of Gaisman's *razor* is *not* an issue in this suit. Respondent deliberately refrained from suing on the razor claims of the patent: the only claims in suit are claims drawn to the naked blade which forms only one element of the razor assembly and must be considered as a separate and independent entity. These claims, we assert, are invalid both for lack of invention and for anticipation. If, however, they are to be given a construction so limited as to save them, then in that case they cannot possibly be infringed by the manufacture and sale of petitioner's blade. Furthermore, to sustain these claims and hold them infringed by petitioner's blade would be, in effect, to revive respondent's former monopoly in the wafer-type safety razor blade, a monopoly that expired forever with the original Gillette patent. For Gaisman's blade, like Gillette's, is but a two-edged wafer of steel, pierced for mounting within its holder; a blade long since in the public domain and subject to no man's monopoly.

ARGUMENT.

IT IS NO INVENTION TO SHAPE A TOOL TO FIT ITS HOLDER.

Whatever merit Gaisman's *razor* may possess, his *blade* possesses only the expected merit of any safety razor blade shaped to fit its holder. For when all is said and done, and the non-face-cutting virtues of the patented razor have been exhaustively examined, duly recorded and generously acknowledged, it still remains true that Gaisman's blade has a diamond-shaped hole simply because his razor guard has a diamond-shaped stud. Need the Genius of Invention be invoked to provide square holes for square pegs to fit? It still remains true that Gaisman's blade has notches in its ends because his razor cap has inwardly projecting pins which would otherwise interfere with the blade. Did the cutting of these notches to receive these pins and thereby make it possible to use the blade in the razor, call for more than the exercise of the very most ordinary common sense? If one invents an odd-shaped razor, need one then *invent* an odd-shaped blade to fit it? Doesn't the shape of the razor determine the shape of the blade; the shape of the key-hole, the key?

But we have asked enough rhetorical questions. That no invention is required to shape a tool to fit its holder, the tool being otherwise unchanged, seems elementary, and for that reason alone Judge Clark was indisputably right in holding the claims invalid. This same conclusion was reached by the Court of Appeals for the Second Circuit in *Gillette Safety Razor Company* v. *Standard Safety Razor Company*, 64 F. (2d) 9, wherein a similar blade, notched and slotted to fit the so-called bar-type Gillette razor, was charged to infringe another of plaintiff's patents. In the razor involved in that suit the cap was provided with a longitudinal bar and corner lugs projecting from its inner, blade-engaging face. The Court of Appeals, speaking through Judge Manton, said:

> "Appellant makes and sells a notched and slotted replacement blade because it is necessary for the shape of the blade in order to fit the appellee's razor cap with a bar. * * * It was the obvious and inevitable thing to do to cut the blade to fit the bar. And replacement blades must necessarily have a long slot in addition to the corner notches."

The same reasoning being applicable here, Judge Manton's language may be aptly paraphrased: It was the obvious and inevitable thing to do to cut the blade to fit the diamond-shaped stud. And replacement blades must necessarily have a diamond-shaped opening in addition to the end notches.

Gaisman may have made the so-called safety *razor* safe, but the so-called safety razor *blade* he left no less deadly than before. He may have invented a razor: *he did not invent a blade.* . . . Besides

THE CLAIMS IN SUIT ARE ANTICIPATED.

The structure of the Gaisman blade is simple—a blade having a non-circular (preferably diamond-shaped) central opening and end notches. The claims in suit contain, it is true, statements of function, but these cannot alter the essential simplicity of the claimed *structure.*

We here set down claim 1 with the structural elements in bold face and the functional statements in Roman:

1. **A blade having**

   (a) **a non-circular opening substantially centrally disposed** to retain the blade in shaving relation to a guard member **and**

   (b) **means spaced from said opening** to cooperate with a clamping member to retain the latter in shaving relation to the blade independent of the guard member.

Safety razor blades having precisely this *structure* were old long before Gaisman put one of them into his razor, and are fully disclosed in the expired patents to Hartman, 1,247,266, November 20, 1917 (R., 175), and Ballreich, 1,246,219, November 13, 1917 (R., 169). The blades of these two patents are here illustrated:

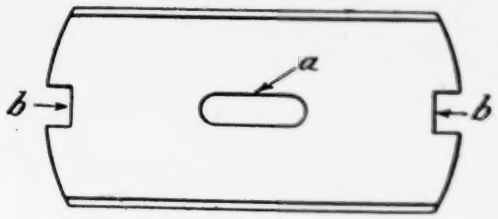

Fig. 3. The Hartman Blade,
Patent No. 1,247,266, November 20, 1917.

This blade, like the blade of the Gaisman patent, is a double-edged safety razor blade of the wafer-type. Like Gaisman, the Hartman blade has "a non-circular opening substantially centrally disposed"—the opening *a*. It also has "means spaced from said opening"—the notches *b*. Hartman, therefore, completely anticipates the claims in suit.

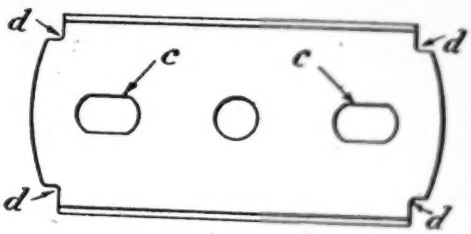

Fig. 4. The Ballreich Blade,
Patent No. 1,246,219, November 13, 1917.

This blade, also a double-edged blade of the wafer-type, has *two* non-circular openings *c* instead of the single opening of the Gaisman blade. Respondent will not, however, contend that this distinguishes Ballreich from Gaisman,

nor will it contend that Ballreich's non-circular openings are not "substantially centrally disposed". It will not do these things because petitioner's blade (Fig. 2) likewise has two openings *c* located precisely where Ballreich's openings are located. Ballreich's blade has "means spaced from said openings"—the notches *d*. These notches are at the corners of the blade and not in its ends as in Gaisman. Here again respondent will not argue for a difference, because in petitioner's blade the notches are likewise at the corners. In fine, petitioner's blade resembles Ballreich's blade more closely than it resembles Gaisman's. If petitioner's blade infringes, as respondent contends and the Court of Appeals held, then Ballreich most certainly anticipates the claims in suit.

Respondent's argument with respect to Hartman and Ballreich will be that the Hartman and Ballreich *razors* are different from the Gaisman *razor;* that neither Hartman nor Ballreich solved the problem of making the so-called safety razor safe. But in advancing these arguments, respondent, like the Court of Appeals, will ignore the simple fact that the comparative merits of these several razors are not in issue. However great the excellence of the Gaisman razor may be, petitioner, a blade maker, has not been charged with appropriating that excellence to its own uses. The only claims sued upon are claims to the blade itself.

These blade claims, as we have seen, contain statements of function. Respondent will stress these and will argue that the Hartman and Ballreich blades were not *intended* to perform those functions, nor could they have performed them in the Hartman and Ballreich razors. Now the chief end and function of a safety razor blade is to shave, and the degree to which it achieves that end and performs that function depends primarily, we should suppose, upon the keenness of its edge and the temper of its steel. The holder doubtless contributes to the result to the extent that it properly supports and directs the blade; but that,

after all, is not the business of the blade. There is no reason to suppose that the Hartman and Ballreich blades do not perform this primary function quite as acceptably as the Gaisman blade. The supposedly novel functions set out in the claims in suit are simply the locating functions of the central opening and the end notches. Can such things be patentable? The central opening and the end notches of the Hartman blade exist for the sole purpose of properly locating the blade in its holder, and the corners of the Ballreich blade are notched for no other reason. It is true that when the Hartman blade is used in the Hartman razor its central opening acts to retain the blade in relation to the cap rather than to the guard, but in both Hartman and Ballreich the end notches coöperate with the cap or clamping member to retain it in relation to the blade.

But this, though it reduces the alleged invention to the vanishing point, is of secondary importance. Of primary importance is the plain fact that both the Hartman and Ballreich blades are inherently, and by the very laws of their being, *capable* of performing *all* the functions of the Gaisman blade—and have been so capable for nineteen years. Only a holder, properly designed for the purpose, has been lacking. Such a holder might or might not have been patentable—with that we are not now concerned—but the blades themselves, having been ready to hand five years before Gaisman filed his application, could not have been patentable to him at that time.

In Figures 5 and 6 (pp. 14 and 15) we have shown—if any showing of a fact so clear be necessary—how the Hartman and Ballreich blades are capable of performing all the claimed functions of the Gaisman blade. Here we have reversed the process earlier referred to and have, so to speak, made the keyhole to fit the key; thereby demonstrating that whether, in Gaisman's mental processes, the diamond-studded holder preceded the diamond-holed blade, or the other way about, the result is the same.

THE BLADE

of

HARTMAN PATENT NO. 1,247,266, NOVEMBER 20, 1917
DEFINED IN TERMS OF GAISMAN'S CLAIMS

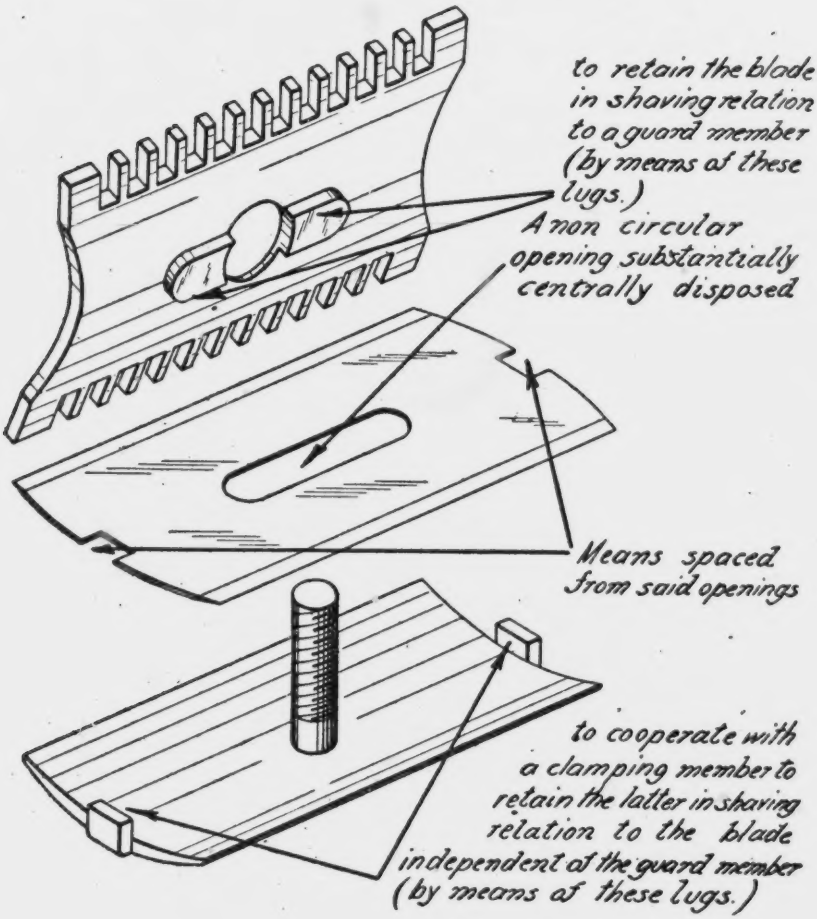
to retain the blade in shaving relation to a guard member (by means of these lugs.)
A non circular opening substantially centrally disposed
Means spaced from said openings
to cooperate with a clamping member to retain the latter in shaving relation to the blade independent of the guard member (by means of these lugs.)

Fig. 5.

Showing How the Old Hartman Blade Is Structurally Capable of Performing All the Claimed Functions of the Gaisman Blade—to the Extent That the Gaisman Blade Performs Them.

THE BLADE

of

BALLREICH PATENT NO. 1,246,219, NOVEMBER 13, 1917
DEFINED IN TERMS OF GAISMAN'S CLAIMS

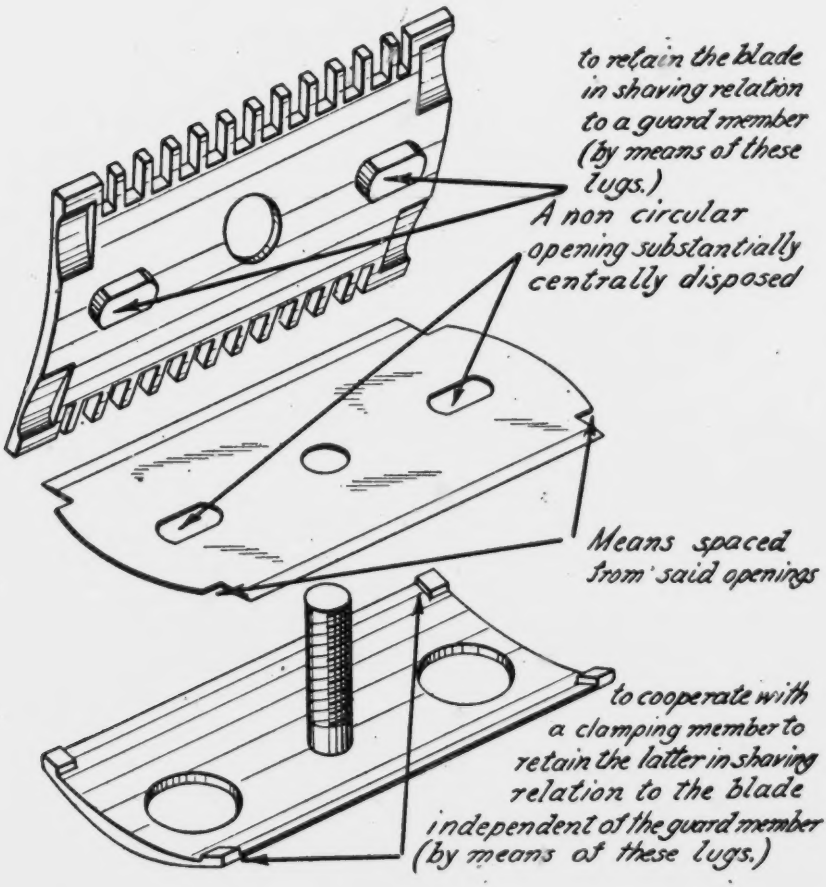
to retain the blade in shaving relation to a guard member (by means of these lugs.)
A non circular opening substantially centrally disposed
Means spaced from said openings
to cooperate with a clamping member to retain the latter in shaving relation to the blade independent of the guard member (by means of these lugs.)

Fig. 6.

Showing How the Old Ballreich Blade Is Structurally Capable of Performing All the Claimed Functions of the Gaisman Blade—to the Extent That the Gaisman Blade Performs Them.

Respondent will be quick to point out that the razors shown in these figures are not Hartman and Ballreich razors; and in that respondent will be quite right. These razors are, in effect, Gaisman razors—or, if respondent prefers, Goodwill razors—but the *blades* are Hartman and Ballreich *blades*—no doubt of that—and as they are structurally and functionally indistinguishable from the Gaisman blade, as claimed, it follows inexorably that the Gaisman blade claims are anticipated by Hartman and Ballreich. *Quod erat demonstrandum* . . . . Yet the Court of Appeals completely ignored Ballreich—there is not one syllable about him in the opinion—and of Hartman noted merely (R., 233) that "this patent . . . . left no impress on the art and was but an abortive conception with no factory birth or sales maturity"! But Hartman's blade, we venture to suggest, was born anew in Gaisman's razor, and came to maturity, *mutatis mutandis,* in the Goodwill.

As a matter of fact, the nice fit and precision of blade mounting whereby Gaisman made the so-called safety razor safe had been achieved long ago by Gillette himself. Respondent's expert testified on cross examination:

> EXPERT—"If you are to locate the blade of a safety razor in such a manner as to make it effective as a safety razor and suitable for the comfort and convenience of the people who use it, it must be positioned to have your structure so that you can locate the blade with precision to very few thousandths, and therefore the proper fits for assembling these things for convenience and so on must be accompanied not with a looseness but with a degree of precision that will enable the blade to stay where it belongs."
>
> COUNSEL—"Isn't that substantially the result achieved by the original pioneer Gillette patent?"
>
> EXPERT—"By another construction in another way, the same thing was accomplished. The blade was properly positioned" (R., 66).

Was it not then Gillette, after all, who first made the so-called safety razor safe—and not Gaisman? If, due to faulty manufacture, Gillette safety razors had come to belie their name it was due to no fault on the part of Gillette himself.

IT IS NOT PATENTABLE TO APPLY AN OLD DEVICE TO A NEW USE.

The most that Gaisman did—if he did anything—was to perceive that a Hartman or a Ballreich blade might be used in his, Gaisman's razor. But that did not entitle him to a new patent on the old blade. An old structure cannot be patented or re-patented merely because someone has perceived in it a new utility. The law on this point is well summed up in 48 *Corpus Juris* 77, Sec. 84:

> "Invention is not involved in the mere conception of applying an old method or device to a new use".

And as long ago as 1875 this Court in *Roberts* v. *Ryer*, 91 U. S. 150, 157, said:

> "It is no new invention to use an old machine for a new purpose. The inventor of a machine is entitled to the benefit of all the uses to which it can be put, no matter whether he had conceived the idea of the use or not."*

(Here indeed it is difficult to perceive any "new" purpose. Hartman, Ballreich and Gaisman all disclose double-edge safety razor blades mounted in holders and intended for shaving.)

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*To the same effect also:

Ansonia Brass and Copper Company v. Electrical Supply Company, 144 U. S. 11, 17.

Knapp v. Morss, 150 U. S. 221, 227, 228.

Powers-Kennedy, etc., Corp. v. Concrete, etc., Co., 282 U. S. 175, 186.

INFRINGEMENT.

It was Gaisman who, in the opinion of the Court of Appeals, first made the so-called safety razor safe, attaining that very humane end, said the Court, by reducing by 2/1,000 of an inch the variation in blade exposure possible in the old Gillette razor—a variation resulting, as we have explained, from cumulative tolerance errors. It is clear, therefore, that Gaisman must rely upon a nice fit between blade and guard, else his improvement, measured as it is in thousandths of an inch, is irretrievably lost. Gaisman himself, though innocent of the revolutionary character of his invention and striving only for greater convenience of assembly, points out that the diamond-shaped projection on the guard is "adapted snugly to receive" the diamond-shaped opening in the blade "so that the blade will, by said projection, be retained upon guard member 1 with its cutting edges in shaving relation to the guard teeth when the parts are assembled" (Patent, pp. 1, 2, lines 110-6; R., 121, 122). Respondent's expert was in agreement, as we have pointed out two pages back:

> "the proper fits for assembling these things for convenience and so on must be accompanied not with a looseness but with a degree of precision that will enable the blade to stay where it belongs" (R., 66).

The Court of Appeals likewise recognized this important truth, observing:

> "that the usable, permissible, workable position zone within which the blade will cut the beard and not cut the flesh, is the almost microscopic zone of eight one thousandths of an inch in breadth. Outside of that zone the blade will either flesh-cut or non-hair-cut—and the zone is so narrow that it cannot be located by sight or determined by touch. Indeed, as the diameter of a hair is one-two hundred and fiftieths of an inch,

> which is equivalent to four-one thousandths of an inch, the width of the proper cutting position zone may be aptly described as a 'hair breadth'. From this it follows that if it is done, the razor must necessarily automatically do two things, first, locate the cutting edge of the blade initially in this microscopic safety zone, and secondly, must immovably hold it there during the shaving operation. And if the patentee's device so acts as to effect these two things, the device would seem to be of high merit, an important advance, and one worthy of patent protection'' (R., 237, 238).

The Court concluded that the patentee's device did so act and that

> ''the hitherto passive, flexible blade of the old Gillette razor became the dominant factor which mechanically determined the initial and safe position of the cutting edge and mechanically held it in that safe and efficient position, rigidly and without variance or shadow of turning. For the first time in the art it produced a safe, non-face-cutting Gillette razor . . . .'' (R., 244).

It seems altogether probable that Judge Buffington, who delivered himself of the foregoing, had never placed one of petitioner's blades in respondent's Goodwill razor. For had he done so he would have sought in vain for that nice fit ''without variance or shadow of turning'' wherewith Gaisman had made the first non-face-cutting Gillette razor. He would have discovered, as had respondent's expert before him, that the fit, far from being snug and ''not with a looseness'' is very loose indeed. (''That is a loose fit of the blade'' said the expert, viewing petitioner's blade on respondent's guard [R., 67].) He would have discovered that petitioner's blade might shift, not a mere 3/1,000 of an inch, not so little as 5/1,000 of an inch even, but four times as much—something like 20/1,000 of an inch, so loose is the fit. And he would have con-

cluded that petitioner, unlike Gaisman, had contributed precious little toward making the so-called safety razor safe. (We are speaking, of course, of the initial positioning of the blade on the guard. Once the parts are assembled and the flexing pressure applied, every Gillette-type blade is frictionally held "without variance or shadow of turning", diamond studs or no.)

Respondent, it seems to us, is faced with a dilemma from which there is no escaping. If petitioner's blade infringes because it is *capable* of making a snug fit in a proper razor, and because it is *capable* of positioning a proper cap and guard "without variance or shadow of turning", despite the fact that in respondent's razor it does none of these things, why then the claims are met by Hartman and Ballreich, whose blades, as we have demonstrated, have those same capabilities. If, on the other hand, mere capability is not enough, and if Hartman and Ballreich are ruled out for that reason, then in that case there is no infringement.

Such was the conclusion of the Court of Appeals for the Second Circuit in the *Hawley* case, *supra*, wherein a notched and slotted blade (illustrated in Fig. 7) substantially like petitioner's was also charged to infringe the

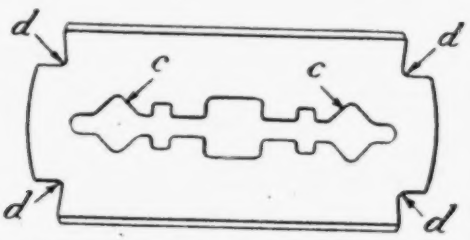

Fig. 7. The Hawley Blade.

Gaisman patent. The Court in that case was unable to find Gaisman's snug fit when the defendant's blade was placed in respondent's razor:

> "In the appellant's blade, although there is a non-circular opening substantially centrally disposed, the opening does not fit snugly upon any projection or stud in the guard or on any other part of the razor frame, and cannot perform the function of positioning the blade with respect to the guard which is performed by the diamond-shaped opening in the patentee's blade which fits snugly upon the diamond-shaped projection in the razor. There is not a non-circular centrally disposed opening in the appellant's blade retaining the blade in any relation whatsoever to the guard member. Moreover, the matter of obtaining proper shaving relation between the parts of the razor and the blade is not new in the present type of Gillette razor".

Having thus impaled respondent on the horn of no infringement, the Court had no need for the other horn of anticipation.

RESPONDENT'S MONOPOLY OF THE WAFER-TYPE SAFETY RAZOR BLADE HAS EXPIRED.

For seventeen years respondent enjoyed a full and complete monopoly of the wafer-type safety razor blade: Gillette's original patent No. 775,134 (R., 137) covered this blade broadly and was generously sustained in *Clark Blade & Razor Co.* v. *Gillette Safety Razor Co.*, 194 Fed. 421. Until that patent expired no one in the United States, other than respondent, might make and sell a safety razor blade so thin as to require external support. But in time the patent did expire, as patents must, and with it expired respondent's monopoly, as patent monopolies are intended to expire. (Congress may secure to inventors the exclusive rights to their discoveries "for limited times" only.) In recent years respondent has attempted time after time to breathe again the breath of life into that once robust, but now defunct monopoly; but always in vain—always, that is, until the Court of Appeals for the Third Circuit reversed the District Court in the instant case.

The story of these futile attempts at artificial respiration—four different suits on four different patents—is told in the law reports*; we shall not retell it. Enough to say that every patent involved in those suits disclosed some new blade-engaging projection on cap or guard, necessitating a corresponding perforation, slot or notch in the blade and thereby making obsolete the old simple three-hole blade. (Razor blades must fit all extant razors.) All of these patents related in the end to means for mounting the blade in its holder. In some of the suits direct infringement of blade claims was charged (as here), in some contributory infringement of holder and blade combination claims, in some both. But in all the outcome was the same: no case for plaintiff. It is no contributory infringement to supply new blades for old to legitimate owners of respondent's patented razors. *Wilson* v. *Simpson*, 9 How. 109. Nor is it patentable, in any event, to notch and slot a safety-razor blade to make it fit some new-studded razor. It would indeed be a travesty on the patent system if Gillette's expired monopoly of the wafer blade might be indefinitely prolonged by the simple expedient of varying from time to time the shape and location of the holes by means of which that blade is fastened in its holder.

Oddly enough, no one has stated the case for petitioner better than Judge Buffington himself, writing the opinion of his Court in another safety razor patent case, *American*

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*Gillette Safety Razor Co. v. Standard Safety Razor Corp., 64 F. (2d) 6.

Gillette Safety Razor Co. v. Standard Safety Razor Corp., 64 F. (2d) 9.

Gillette Safety Razor Co. v. Hawley Hardware Co., 64 F. (2d) 10.

Gillette Safety Razor Co. v. Standard Safety Razor Corp., 74 F. (2d) 691.

Safety Razor Corp. v. *Frings Bros. Co.*, 62 F. (2d) 416, 417:

> "Turning then to the question whether the supply blade of defendant infringes plaintiff's patent rights, we note that the safety razor art is a thoroughly occupied field. Originally novel and radical in character and for years the subject of patentable novelty and the source of large profits, the field has been thoroughly developed, and as a result thereof and the employment of skilled engineering in its progress, improvement and development are naturally to be looked for. Moreover, courts in dealing with an art, originally pioneer in origin, must carefully scrutinize the constant efforts of those who have enjoyed a profitable patent monopoly to lengthen such monopoly by patents for non-inventive changes."

Judge Clark, quoting and following this very excellent precept, dismissed the bill; only to discover, when the case went up on appeal, that his very excellent preceptor had meanwhile changed his mind.

THE CANADIAN LITIGATION

The Canadian patent corresponding to the patent in suit has been litigated in Canada in an action brought by *Gillette Safety Razor Company of Canada, Limited,* against *Pal Blade Corporation, Limited, et al.* As in the instant case, only the blade claims of the patent were in suit and of those, claims 4 and 5 of the Canadian patent were claims 1 and 2 of the U. S. patent *verbatim.* The alleged infringing blade, having been designed to fit respondent's Goodwill razor, was substantially the same as petitioner's blade and the blade considered by the Court of Appeals for the Second Circuit in the *Hawley* case. The reasoning of the Canadian courts is, therefore, germane to the issues

before this Court and a consideration of the Canadian opinions will, we believe, be helpful.

After a trial on the merits, the Exchequer Court of Canada dismissed the action, holding the claims invalid for lack of invention, [1932], Ex. C. R. 132. In its opinion the Court, speaking through Mr. Justice Maclean, said:

> "The issue is therefore limited to whether or not there is invention in the blade. The combination of the blade with the other parts of the razor is not before the Court, • • •.
>
> "Now, is there anything in the blade which denotes invention? The blade it is claimed, is retained in shaving relation in the cap member by shoulders placed at each corner on the inner face of the cap member, the four corners of the blade being notched to position the blade within the four shoulders, and thus the blade is said to co-operate with the cap member. But that feature of the blade, or the razor, was not new, it was old in the art. Ballreich (U. S. A., 1917) showed the same thing. To make a blade that fits within the four corner shoulders of the cap member is hardly invention. Then the blade is said to co-operate with the guard member because certain perforations in the blade will fit the two diamond shaped lugs or projections on the guard member; but these diamond shaped perforations co-operate with the same shaped projections on the guard member just as the perforations in the old Gillette blade co-operated with the two pins on each side of the central screw in the cap member. The fact that the projections are on the guard member instead of the cap member, or that the perforations in the blade are of a particular shape, is of no consequence.
>
> • • • • • •
>
> "The diminution of possible variations in blade exposure is not subject matter for a patent in my opinion, even if it is a fact; in any event I should doubt if that virtue is the consequence of the blade alone.

> Factory improvements, the little improvements and betterments in technique that skilled workmen devise, just because they are skilled, should not be the subject of monopoly and do not constitute subject matter for a patent. Notwithstanding the very ingenious presentment of the plaintiff's case, and the very ingenious specification of the patentee, I do not think there was invention in the razor blade in question at the date of the plaintiff's Letters Patent."

An appeal to the Supreme Court of Canada was dismissed, [1933], S. C. R. 142*. Although agreeing with the trial court that the blade, as a blade, was devoid of invention ("Even if there be valid subject matter of a patent in the blade alone—and our present view would be that there is not"), the Supreme Court took very much the same view of the claims as that taken by the Circuit Court of Appeals for the Second Circuit in the *Hawley* case and found no infringement. In reaching this conclusion the Court, speaking through Mr. Justice Rinfret, said:

> "In dealing with these claims, one must remember that they have reference only to the blade. They have nothing to do with the combination of blade, guard and cap covered by the subsequent claims and which is the true subject-matter of the patent. For the purpose of construing the claims, we must assume that the holder is neglected, and the blade must be envisaged, not as an element of the combination, but as a separate article independent of the other component parts of the razor. And the question must be: Is that blade standing alone as described a good and valid subject-matter of a patent?
>
> "In that view and as presented in the specification, the blade would be an appendant or subordinate inven-

*A copy of the opinion will be found at page v of the appendix to the brief in support of the petition.

Statement of the Case.

The conflict of decisions is as to infringement:

Although petitioner stated in its brief (p. 8) in support of the petition for writ of certiorari, that if the petition were granted petitioner would urge that the court below erred in holding claims 1 and 2 of the Gaisman patent in suit No. 1,633,739 (R. 120) valid, the sole ground for granting the writ, relied upon in the petition (p. 5), was that, in holding the said claims infringed by petitioner's safety razor blade, the court below rendered a decision *on infringement* in conflict with the decision *on infringement* of the Circuit Court of Appeals for the Second Circuit in *Gillette Safety Razor Co.* v. *Hawley Hardware Co.*, 64 F. (2d) 10.

The District Court, in that case in the Second Circuit, held (60 F. (2d) 1019) that claim 1, and claim 3 not here in suit, of the Gaisman patent were valid and had been infringed by the blade there involved (illustrated, *infra*, p. 29).[1] The Court of Appeals reversed *sólely on the ground of non-infringement without disturbing in any way the District Court's conclusion that the patent is valid.* Thus, the only question on which there has been a conflict of decisions is as to infringement.

Apparently in the circumstances stated this Court will consider only the matter of infringement because that was the only ground upon which the petition was based.[2] As was said recently in the *Morehead* case (cited below):

> "This court confines itself to the ground upon which the writ was asked or granted."

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[1] Claim 2, here in suit, was not relied on in the *Hawley* case. For the purpose of this litigation, claim 1 may be considered as typical of both claims 1 and 2.

[2] *Alice State Bank* v. *Houston Pasture Co.*, 247 U. S. 240, 242;
Webster Co. v. *Splitdorf Co.*, 264 U. S. 463, 464;
Steele v. *Drummond*, 275 U. S. 199, 203;

However, since petitioner's brief deals with the validity of the patent we have discussed that subject also.

Gaisman's contribution to the art:

Gaisman, by his invention set forth in the patent in suit, introduced into the safety razor art (created by Gillette) a new principle in accordance with which the *blade* was caused to perform an entirely new function, namely, that of retaining the guard and cap in accurate relation to one another and to the blade. The invention entirely avoided the cumulative effect of the necessary clearances between the parts of razors of the Gillette type which "must be capable of being taken apart and put together often and speedily" (Opinion, R. 238). As pointed out in the opinion below, the invention had the advantage of increasing by as much as 40% the accuracy with which the blade is positioned in the razor (R. 240, 241), thus, for the first time in the art, producing "a safe, non-face cutting Gillette razor" (R. 244)—a device "of high merit, an important advance, and one worthy of patent protection" (R. 238).

The new principle, taught by Gaisman, is not disclosed anywhere in the prior art. By its use the blade became the active element or key by which the positioning of all three parts of the razor was accomplished. As stated by the court below (R. 235):

> "We here note, as above stated, that in this Gillette type of razor Gaisman sought to improve, the blade

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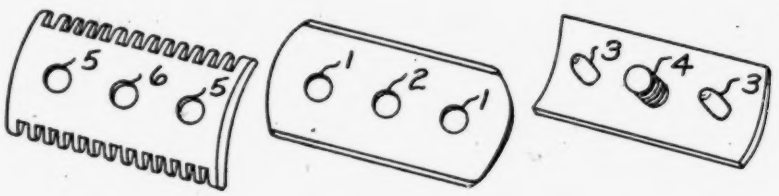
Sanitary Refrigerator Co. v. *Winters*, 280 U. S. 30, 34;
Gunning v. *Cooley*, 281 U. S. 90, 98;
Page v. *Arkansas Gas Corp.*, 286 U. S. 269, 270, 271;
Johnson v. *Manhattan Ry. Co.*, 289 U. S. 479, 494;
Smith v. *Snow*, 294 U. S. 1;
Clark v. *Williard*, 294 U. S. 211, 216;
Morehead v. *People of State of New York* (No. 838, Oct. Term, 1935), 56 S. Ct. 918, 920; 298 U. S.

was a passive, non-controlling and non-operating element in fixing, determining or maintaining the relation of the backing member and the guard member and *that his invention was in now making the blade the dominating and exclusive factor which positioned, maintained and kept in proper cutting position, first, the backing member; second, the guard member; and third, the proper cutting edge of the blade itself.*"

Prior to Gaisman, safety razors and blades of the Gillette type were commercially constructed as shown below.



GUARD BLADE CAP OR BACKING MEMBER

This blade is provided with three round holes 1, 1 and 2. When the razor is assembled, the two studs 3 on the cap or backing member project through the two outermost holes 1 of the blade and into the outermost openings 5 in the guard. The screw threaded spindle 4 projects through the middle hole 2 of the blade and into the middle opening 6 in the guard.

This old arrangement is described in the Gaisman patent as follows (R. 121, ll. 7-18):

"In the class of razors described it has been customary, so far as I am aware, to provide the backing member [cap] with pins that project through holes in the blade and into holes in the guard member, whereby the blade and the backing are retained from

> rotation on the guard by the cooperation of said pins with the guard and the clamping of the blade between the guard member and the backing member, so that the blade performs no function in retaining any of said parts with relation one to another."

In this old arrangement the three parts of the razor were positioned solely by the passage of the two positioning pins 3 on the cap through the blade and into the registering openings 5 in the guard. *The sole positioning means were the pins 3.*[1] The blade had nothing whatsoever to do with the positioning of the cap with respect to the guard, that being accomplished directly by the passage of the pins 3 into the openings 5 of the guard. *The blade was wholly inactive or passive in this positioning of the parts of the razor with respect to each other.*

Gaisman's conception on the other hand involved making the blade the active element or key by which the positioning of all three parts of the razor was accomplished. Thus, the patent specification states (R. 121, ll. 19-30):

> "The object of my invention is to provide a safety razor wherein a blade will cooperate with a guard member to retain the blade in shaving relation thereto and the blade will also cooperate with a backing member to retain the latter in proper relation to the blade for shaving purposes, so that the position of the backing member with regard to the guard member is maintained by the blade and not by the cooperation of said members together in the well known manner I have described above."

We shall describe how this was accomplished by Gaisman by referring to respondent's Exhibit 10 (R. 131), re-

[1] The screw threaded bolt 4 served only to clamp the parts together. It did not position the parts. There is a large clearance between the bolt 4 and the openings 2 in the blade and 6 in the guard (see the razor Ex. P-6).

produced opposite this page. The guard, blade and cap in the lefthand column of this Exhibit are those illustrated in the Gaisman patent. The guard and cap in the right-hand column are the guard and cap of respondent's commercial embodiment of the Gaisman razor, which is known as the Goodwill razor, and the blade is petitioner's infringing blade.[1] The corresponding parts in both sets of figures bear corresponding numerals.

The Gaisman blade:

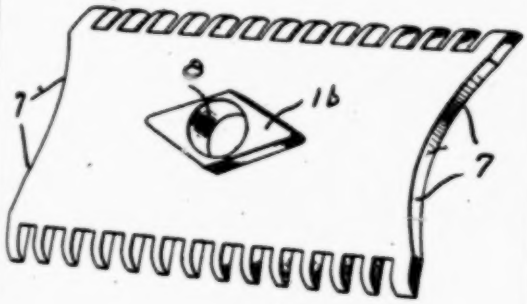
The blade of the patent in suit is provided with an opening 2a designed to fit over a corresponding projection 1b on the guard. Whatever may be the shape of the opening and of the projection, the fact that the opening in the blade fits over the projection on the guard will cause the blade to be in proper position with reference to the guard, and to remain so, so far as concerns longitudinal or lateral shifting on the guard, except for such shifting as results from the necessary clearances and "tolerances" allowed in manufacture.

But if the opening and projection were circular in form, the blade would be free to rotate around the projection on the guard so the patentee provides means "to keep the blade from rotation on" the guard (patent, p. 1, line 100). In order to accomplish this, the opening in the blade, instead of being made circular in form, which would permit the undesired rotation, is made non-circular, or angular, in form, which prevents rotation.

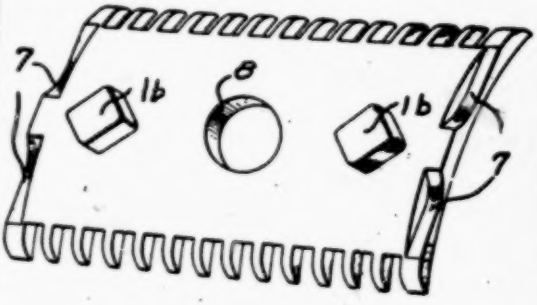
If force is then applied, tending to rotate the blade on the guard, the metal near each end of the non-circular opening will bear on the corresponding portions of the pro-

[1] Petitioner does not make or sell guards and caps, but only blades to fit Goodwill razors made and sold by respondent.

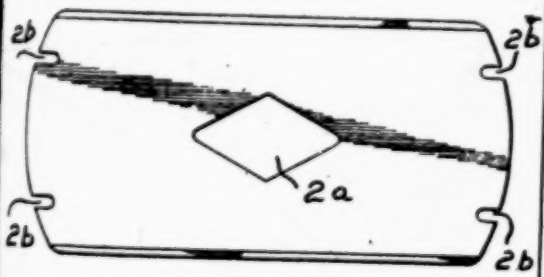
GUARD OF RAZOR OF
GAISMAN PATENT.



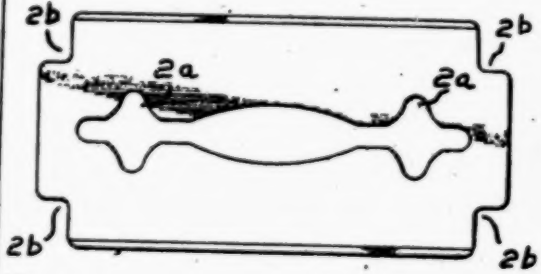
GUARD OF GILLETTE
GOODWILL RAZOR



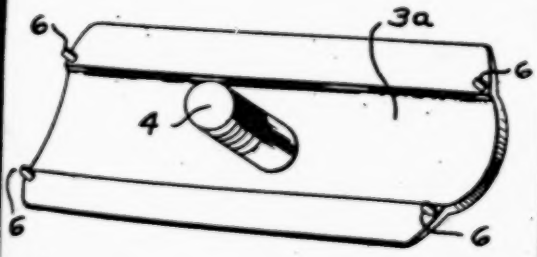
BLADE OF
GAISMAN PATENT



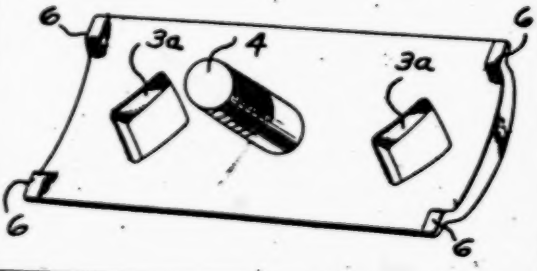
DEFENDANT'S BLADE



CAP OF RAZOR OF
GAISMAN PATENT



CAP OF GILLETTE
GOODWILL RAZOR.



jection from the guard and prevent all rotation except that due to the necessary clearances and "tolerances".

It is clear that with any given fit greater angular rotation of the blade on the guard will occur if the force to oppose such rotation is nearer the center of rotation than if it is further away. It will be noted that the blade opening shown in the patent in suit is not square but is diamond-shaped; it is considerably longer in the direction of the length of the blade than in the direction of its width. That is, it is extended along the center line of the length of the blade.

The non-circular opening in the blade thus causes the blade, and consequently also its cutting edges, to be positioned accurately with respect to the teeth of the guard, and to remain in that position.

Also the patentee, contrary to all prior teachings, provides that his blade shall be the sole means for accurately positioning the *cap* with relation to both blade and guard. This is accomplished by means of the four recesses 2b near each of the four corners of the blade which recesses are entered by the four projections 6 on the cap.

The screw-threaded spindle 4 on the cap passes with a large clearance through the center of the blade and through the opening 8 in the guard and serves merely to draw the parts together when the razor handle is screwed up. The two ends of the guard are cut away at 7 so that there is no engagement whatsoever of the cap projections 6 with the guard. And, similarly, there is no engagement whatsoever of the guard projection 1b with the cap, the central zone 3a of the cap being recessed to prevent any such engagement.

The Gaisman blade is, therefore, the sole positioning link between the guard and cap and serves, because of its engagement in its central area with the projection 1b of the guard and its engagements at its four corners with the projections 6 of the cap, as a key whereby the guard and cap are both accurately positioned with re-

spect to each other and also with respect to the cutting edges of the blade.

Petitioner's blade:

Referring to the right hand column of the foregoing Exhibit 10, it will be seen that the defendant's (petitioner's) blade is provided with an elongated opening having end portions 2a, designed to fit over projections 1b on the guard. Whatever may be the shape of the projections and of the end portions of the blade opening into which they extend, the blade will be in proper position with reference to the guard longitudinally and laterally, except for such shifting as results from the clearances and "tolerances" allowed in manufacture.

Also, the blade opening is such as to prevent rotational shifting of the blade on the guard. That opening is not round but is elongated along the center line of the blade, and the portions near each end are adapted to engage projections on the guard and thus effectively to prevent rotation.

Similarly, the blade has four recesses, 2b, for positioning the *cap* accurately with respect to both blade and guard, these recesses being adapted to be entered by the four projections 6 on the cap.

And, as in the Gaisman razor already described, the screw-threaded spindle 4 on the cap passes with a large clearance through the opening 8 in the guard and serves merely to draw the parts together when the razor handle is screwed up. The guard of the Goodwill razor is likewise cut away at 7 so that there is no engagement whatsoever of the cap projections 6 with the guard. Nor is there any engagement between the projections 1b of the guard and the cap, the cap being cut away at 3a to prevent any such engagement.

Therefore, just as Gaisman's blade, petitioner's blade is the sole positioning link between the guard and cap and serves, through its engagement in its central area with the projections 1b of the guard and at its ends with

the projections 6 of the cap, as a key by which both guard and cap are accurately positioned with respect to each other and also with respect to the cutting edges of the blade.

The claims in suit:

Claims 1 and 2 in suit are as follows:

> "1. A blade having a non-circular opening substantially centrally disposed to retain the blade in shaving relation to a guard member, said blade having means spaced from said opening to cooperate with a clamping member to retain the latter in shaving relation to the blade independent of the guard member."
>
> "2. A blade having an angularly shaped opening disposed substantially centrally in the blade to cooperate with a guard member to retain the blade in shaving position thereon, and said blade being provided with means spaced from said opening to cooperate with a backing member to retain the latter in shaving relation to the blade and to the guard member."

As clearly defined in these claims, the invention consists of a novel blade which is provided with the following combination of cooperating positioning means—

1) a non-circular opening substantially centrally disposed to retain the blade in shaving relation to the guard, and

2) other positioning means, spaced from the first positioning means, to retain the blade in shaving relation to the cap.

These means cooperate to cause the blade to function as a key to retain the guard, blade and cap in far more perfect position with respect to each other than was ever before possible with like clearances and manufacturing tolerances.

The applicability of these claims to petitioner's blade will be apparent from what we have said above, and is further referred to in our argument at pages 17-19, *infra*.

Petitioner does not deny that the claims read word for word on the infringing blade.

The findings of the courts below on infringement:

The Circuit Court of Appeals, concurring in the findings of the District Court, found, with respect to infringement (R. 244):

> "That the defendant's blade is substantially a copy of Gaisman's device is clear."

The District Court found at the trial that petitioner's blade "is a Chinese imitation" (R. 54) and "I have made up my mind there has been infringement" (R. 80). The District Court further found that "the equities are all" on the side of the respondent (R. 54). It appears that the officers of the petitioner were formerly officers of the respondent (R. 244-245). And, as before stated, petitioner manufactures only safety razor blades which it sells for use with respondent's Goodwill razors. Petitioner makes no razor of its own (R. 244).

The advantages of the Gaisman invention:

Neither in the courts below nor here (see Petitioner's Brief, pp. 3, 8) has petitioner denied the advantages which resulted from Gaisman's invention.

The most important advantage, previously mentioned, is that the invention made it possible to increase by as much as 40% the accuracy with which the blade is positioned in the razor.

Although not realized by most people, a safety razor is a precision instrument requiring a high degree of accuracy (Smith, R. 45). The distance which the cutting edges of the blade project beyond a line drawn tangent to the edges of the cap and guard—which represents the plane of the face—must be kept within very small limits, measured in thousandths of an inch. If the blade exposure is excessive the user will cut himself (Norton, R. 62). If the blade exposure is too small, the razor will not

shave. As stated by the court below, referring to the old style Gillette razor (R. 232):

> "We say 'so called safety razor' for in point of fact it was not a safety razor, as the experience of users of this original Gillette razor has been that they have cut themselves on it quite frequently and now continue to do so".

In the manufacture of the original Gillette, all the parts of the razor which effect the positioning of the blade had to be made with great accuracy, the manufacturing tolerances being kept extremely small, of the order of plus or minus one one-thousandth (0.001) of an inch (R. 46). The cost of manufacture is very high because, as Smith, respondent's production engineer testified, *the cost increases rapidly as the standard of accuracy is raised* (R. 46, 47).

Notwithstanding the accuracy with which the original Gillette razors were made, they were subject to an error in blade exposure of five one-thousandths (.005) of an inch resulting from the cumulative effect of the necessary clearances. This error Gaisman greatly reduced. *His invention made it possible to position the blade 40% more accurately while allowing the same tolerances in the manufacture of the razor parts, and, conversely the invention made possible less accurate standards of manufacture while maintaining equal accuracy of positioning of the blade. Thus the cost of manufacture could be greatly reduced* (R. 47).

This is summarized in the opinion of the court below, in the following quotation from the District Court's opinion in the *Hawley* case (R. 241):

> "'The principal utility of the Gaisman invention lies in the fact that it permits less accurate standards of manufacture while maintaining equal accuracy of positioning the cutting edges of the blade with relation to the cap and guard member of the razor. The

accumulated error which is possible in the Gaisman razor is less than the accumulated error of the 'old style' Gillette razor. It appears from the evidence that the Gaisman principle reduces the variation of the blade cutting edge exposure approximately one-third or, if the same tolerance and clearances are maintained, the Gaisman principle improves the average qualities of the razor by about one-third.'

"'Plaintiff's witness T. L. Smith, the production engineer, testified that the greater the tolerance, the lower the cost, and that the greater the precision required, the greater the cost of manufacture. If the tolerances are reduced one-third, the costs would perhaps be doubled (pages 310, 311), and there is no controversion of this testimony in the record. Therefore the effect of the Gaisman invention is either to permit manufacture with less accurate measurements of a razor which will shave satisfactorily or, if the same accuracy is maintained, to produce a more accurate, and therefore a better, shaving instrument.'"

In its brief (p. 3), petitioner states that the only advantage of the invention referred to in the Gaisman patent is that which enables the blade to be more easily or conveniently assembled in the razor by first placing the blade on the guard where it will be held by the non-circular guard projection 1b (the two projections 1b in the Goodwill razor) in exactly the right position to receive the cap. It is true that Gaisman does not specifically state in his specification that he was the first to make "a safe, non-face cutting Gillette razor" as the Court of Appeals held. But it is also true that the entire specification is directed to the correct positioning of all the parts of the razor by means of the blade, "the blade performing a new function in retaining the backing member with relation to the blade and to the teeth of the guard member", as the specification states (R. 122, lines 77-80), which directly resulted in the greater accuracy in blade positioning.

COMPARISON OF OLD STYLE GILLETTE RAZOR AND RAZOR OF GAISMAN PATENT No. 1,633,739 ILLUSTRATING THE POSSIBLE VARIATION IN EDGE EXPOSURE OF THE BLADE DUE TO ERRORS IN MANUFACTURE.

OLD STYLE GILLETTE RAZOR

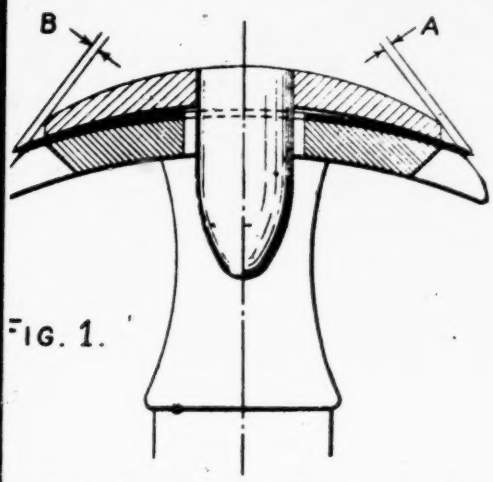


FIG. 1.

RAZOR OF GAISMAN PATENT NO. 1,633,739 IN SUIT

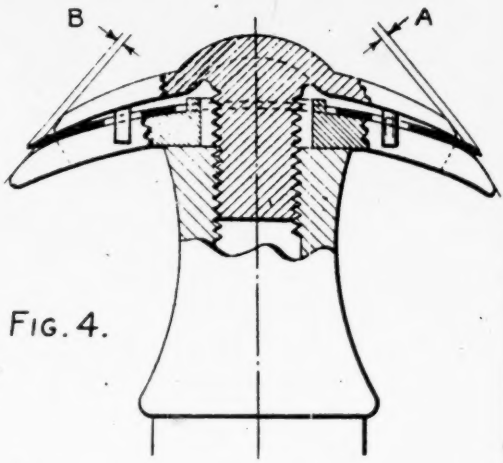


FIG. 4.

CAP, GUARD AND BLADE IN NORMAL POSITIONS GIVING THE DESIRED UNIFORM BLADE EXPOSURE ON BOTH SIDES.

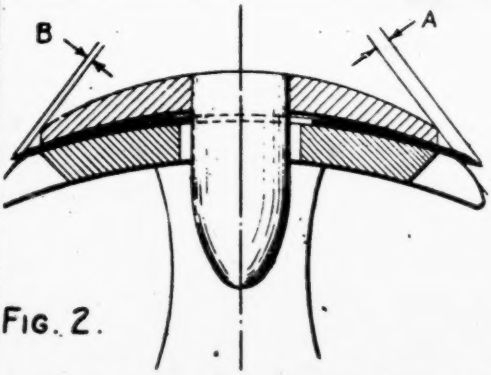


FIG. 2.

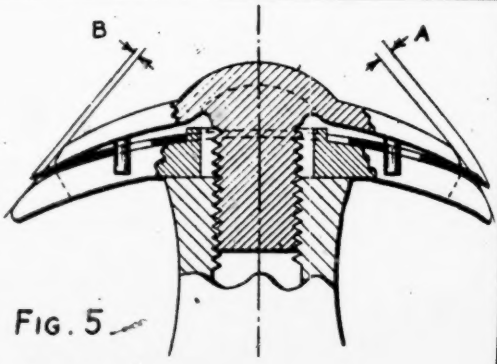


FIG. 5.

BLADE MOVED TO THE RIGHT AS FAR AS POSSIBLE. BLADE EXPOSURE INCREASED AT "A" AND DECREASED AT "B."

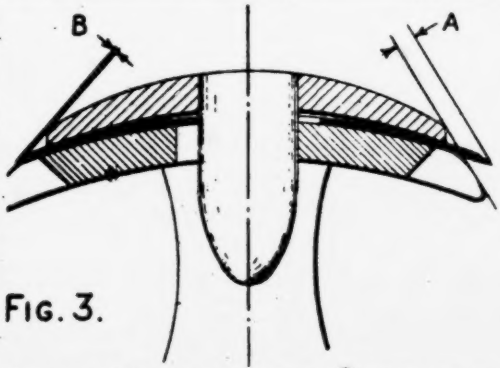


FIG. 3.

THE GUARD OF THE GAISMAN RAZOR CANNOT BE MOVED INDEPENDENTLY TO THE LEFT AFTER THE BLADE HAS BEEN MOVED TO THE RIGHT

BLADE MOVED TO THE RIGHT AS IN FIGS. ~~3~~ 2 AND ~~4~~ 5 GUARD MOVED TO LEFT. BLADE EXPOSURE GREATEST POSSIBLE AT "A" AND LEAST POSSIBLE AT "B."

It is, of course, of no importance whether or not Gaisman stated all the advantages of his invention in his specification, or even that he had knowledge of them. As this Court has repeatedly held, a patentee is entitled to claim for his invention all of the advantages which were inherent in it. *Radio Corp.* v. *Radio Engineering Laboratories, Inc.*, 293 U. S. 1, 14; *Corona Co.* v. *Dovan Chemical Corp.*, 276 U. S. 358, 369; *Stow* v. *Chicago*, 104 U. S. 547, 550; *Robinson on Patents*, Vol. 1, p. 124.

The operation of the Gaisman principle:

How the Gaisman invention works, to produce its greater accuracy in positioning the blade, may be understood from consideration of respondent's Exhibit 8 (R. 127), reproduced on the opposite page. In this exhibit the old style Gillette razor and the razor of the Gaisman patent are compared. The three figures in the left-hand column are of the old style Gillette, and the two figures in the right-hand column represent the Gaisman razor. The same clearances have been used in all of the figures. In Figs. 1 and 4 the cap, the blade (shown as a heavy black line) and the guard of both razors are all centrally located with respect to one another and the exposure of the blade on each side is equal as shown by the equal spaces between the two tangent lines indicated by the letters A and B, respectively. This, of course, would be the ideal exposure.

In Fig. 2, which shows the old style Gillette razor, the cap is centrally placed and the blade is moved to the right the full amount of the clearance space between the hole in the blade and the sides of the positioning stud on the cap. Similarly, in Fig. 5, which illustrates the Gaisman razor, the blade is moved to the right the full amount of the clearance space between the recesses at the ends of the blade and the projections on the cap, but it will be

noticed that in this razor *this movement has at the same time also served to take up all the clearance between the centrally disposed opening in the blade and the projection on the guard.* In both figures the blade edge exposure, indicated by the distance between the two tangent lines A on the right side, has been increased and the exposure on the left side, indicated at B, has been decreased. *This difference in exposure is the greatest difference that can result in the Gaisman construction but, as will appear, it is considerably less than occurs in the old style Gillette razor.*

The latter fact is shown by Fig. 3 in which the cap and blade of the old style Gillette are located in the same position as in Fig. 2, but the guard has now been moved to the left the full amount of the clearance between the cap positioning stud and the hole in the guard. This results in increasing greatly the blade exposure on the righthand side, as shown at A, and in diminishing correspondingly the exposure on the lefthand side, as shown at B. The blade exposure on the righthand side is so great that it will cut the user and that on the other side is so small as not to shave properly. *There is no position of the parts of the Gaisman razor which corresponds to the position of the old Gillette razor of this Fig. 3, because in the Gaisman razor the guard cannot be moved to the left independently after the blade has been moved to the right.* As already pointed out from Fig. 5, the clearance between the central opening in the Gaisman blade and the projection on the Gaisman guard has been completely taken up by the first movement of the blade to the right. It is apparent, therefore, that the guard of the Gaisman razor cannot be moved to the left in Fig. 5 without also moving the blade in the same direction thus decreasing rather than increasing the exposure on the right-hand side.

It will be noted, from the foregoing, that,

(a) in a razor using the old style Gillette blade, *with all of the parts positioned by posts on the cap* projecting through blade and guard, one error in position may occur by movement of the blade to take up clearance between the holes in it and the posts on the cap, and another error in position may occur by movement of the guard in the other direction to take up the clearance between the holes in it and the posts on the cap—*and these two errors are cumulative with respect to blade exposure, increasing it on one side of the razor and diminishing it on the other;* whereas

(b) in a razor using the Gaisman blade, *in which the blade controls the possible movement of the parts,* when the blade has been moved in either direction to take up clearance, such movement takes up simultaneously the clearance between the end openings of the blade and the projections on the cap and also the clearance between the central opening of the blade and the projection on the guard. Therefore, subsequent movement of the guard in the opposite direction will decrease rather than increase the error.

Thus, the cumulative effect of the clearances in the old style Gillette is entirely avoided by the use of the Gaisman invention. *And the result is that the error which can occur in the Gaisman razor with the same manufacturing tolerances is more than a third less than in the old style Gillette razor, and also that correspondingly greater tolerances can be allowed in the manufacture of the Gaisman razor without producing greater variations in blade exposure than occurred in the old style Gillette* (R. 44-45).

The same result is achieved by petitioner's blade (R. 49; *infra,* pp. 26-28).

The invention has been commercially successful:

The utility of the Gaisman invention has not been questioned in this or the earlier litigation. In fact the District Court in the present case stated (R. 43):

> "Everyone concedes that it is an advance over the original Gillette."

The invention has had a large commercial success. Over three million and a half razors and many more millions of blades, embodying the invention, have been sold (R. 50; Opinion, R. 244).

ARGUMENT.

POINT I.

The petitioner infringes.

In the foregoing pages the claims are quoted (p. 9, *supra*), the blade of the patent and petitioner's blade are described (pp. 6-10, *supra*), and there are set forth the new principle of operation introduced by the patentee and utilized by the petitioner (pp. 5, 13-15, *supra*) and the advantages of that principle (pp. 10-13, *supra*).

The new principle of operation fundamentally involves such a construction of blade as enables it to serve to position all three parts of the razor while avoiding the disastrous cumulative effect of the clearances incident to the old method of positioning (*supra*, p. 15). That was the radically new idea which brought about the great accuracy of positioning of the parts with its important advantages, as described above.

In order to make the blade serve to position all three parts of the razor, Gaisman, as we have seen, provided it with a novel combination of cooperative positioning means, consisting of (1) a non-circular opening substantially centrally disposed to retain the blade in shaving relation to the guard, and (2) other positioning means, spaced from the first positioning means, to cooperate with the cap to retain the cap in shaving relation to the blade.

The second element of this novel combination is specified in each of the claims as follows: "means spaced from said opening to cooperate with a clamping" ("backing", according to claim 2) "member to retain the latter in shaving relation to the blade independent of" ("and to", according to claim 2) "the guard member".

These means, as shown in the patent in suit, consist of the recesses 2b in the blade, one near each corner. In the petitioner's blade they consist of the recesses 2b in the corners of the blade (see the drawing facing page 6, *supra*). To say that these means are not the same in each case is absurd. Petitioner, in its brief (p. 7), states, however, that petitioner's blade differs from that of the patent "in having notches at its corners instead of in its ends" but bases no argument thereon. Referring to the drawing of the two blades facing page 6, *supra*, it will be seen that the notches are in the same position in each blade; the only difference (and it amounts to no difference at all) is that the petitioner has cut out and thrown away the small pieces of metal between each of the notches of the patent and the adjoining cutting edge, introducing absolutely no modification of function.

In each blade the function of the notches is to cause the blade to operate on the new principle—to cause the blade itself to act to position the cap with respect to both the blade and the guard.

The first element of the patented combination is specified in the claims in suit as follows: "a non-circular opening substantially centrally disposed to retain the blade in shaving relation to a guard member," or, according to claim 2, "an angularly shaped opening disposed substantially centrally in the blade to cooperate with a guard member to retain the blade in shaving position thereon".

In the blade illustrated in the patent, this opening is made non-circular, or angular, in form and is considerably longer in the direction of the length of the blade than in the direction of its width. The opening, therefore, positions the blade accurately on the guard and prevents undesired rotation (*supra*, p. 6).

Petitioner's blade has the specified opening which retains the blade in shaving relation to the guard in exactly the same way as the opening in the blade shown in the patent. The opening in petitioner's blade cooperates with

the projections on the guard and prevents rotation of the blade thereon. The opening in petitioner's blade is somewhat longer than that shown in the patent. But what of it? The claims specify no particular shape, except non-circular or angular. Gaisman's opening is longer in the direction of the length of the blade than in the direction of the width. Petitioner has merely increased that length.

The claims specify that the opening shall be "substantially centrally disposed". That, obviously, does not mean that each of its corners shall be the same distance from the center; for the form which the patentee uses "by preference" and illustrates is diamond-shaped and is longer along the center line than in the other direction. The "centrally disposed" must mean that it is so placed that, if it were circular in form, the blade could rotate around its center. In both the blade of the patent and the petitioner's blade the opening is on the center line of the blade and is centered on that line; that is, the opening extends as far, along that line, on one side of the center as on the other, and, also, as far from that center line towards one cutting edge as towards the other.

It is true that, in petitioner's blade, only the enlargements at the ends of the opening are filled by the projections on the guard. But that involves no change in function or operation. So far as operation is concerned, the projections on the guard might be joined together so as to fill the entire opening in petitioner's blade, as in the Gaisman patent. Even if the two enlargements at the ends of petitioner's central opening could properly be thought of as constituting two openings, between which is divided the function of retaining the blade in accurate position on the guard, still such mere duplication of parts without change of function, or, the division of function between two parts, which together perform the function, does not avoid infringement.

The law in this respect is too well settled to admit of argument. As stated in *Nathan* v. *Howard,* 143 Fed. 889, 893 (C. C. A. 6; opinion by the late Justice Lurton):

> "Neither the joinder of two elements into one integral part accomplishing the purpose of both and no more, nor the separation of one integral part into two, together doing precisely or substantially what was done by the single element, will evade a charge of infringement. Bundy Mfg. Co. *v.* Detroit Time Register Co., 94 Fed. 524, 538, 36 C. C. A. 375; Dowagiac Mfg. Co. *v.* Brennen, 127 Fed. 150, 62 C. C. A. 257. This principle is even more applicable when the change made relates to mere matter of form not of the essence of the invention."

The situation here is very similar to that in the case of *Line Material* v. *Brady Electric Mfg. Co.,* 7 F. (2d) 48 (C. C. A. 2), as appears from the following quotation from that case (pp. 50, 51):

> "The file wrapper indicates that the allowance of the claims here in suit did not depend upon any essential inclusion of a plurality of holes. When the two sister hooks are connected in assembled relation relative to the plate of the defendant's device, they function together and then act as a clevis.
>
> "Infringement is not avoided by making an element of two separate pieces, rather than a single piece, where the two separate pieces perform the same function as a single device. Pedersen *v.* Dundon, 220 F. 309, 136 C. C. A. 143; Barber *v.* Otis Motor Sales, 240 F. 723, 153 C. C. A. 521. The appellant's device has all the elements of the claim of the patent in suit. The minor changes in the form of the clevis and the plate are fully within their scope, having taken all the essential elements operating in the same way for the special purpose to accomplish the same result, and infringement is clear. Machine Co. *v.* Murphy, 97 U. S. 120, 24 L. Ed. 935; Cantrell *v.* Wallick, 117 U. S. 689, 6 S. Ct. 970, 29 L. Ed. 1017."

As in the above case, there is nothing in the file wrapper of the Gaisman patent in suit nor in the prior art which requires that Gaisman's claims be limited to the particular form of non-circular or angularly shaped opening shown in the patent drawings.

In *Bonnette Co.* v. *Koehler Co.*, 82 Fed. (C. C. A. 6) 428, in which the opinion is by the late Chief Justice Taft, it appears that the defendant had merely doubled the parts of the lawn sprinkler covered by the patent in suit. Finding infringement, the Court stated (p. 431):

> "The root of Bonnette's conception was that if, in a rotary sprinkler with concave wings, the water was delivered into the wings from one side, the area of sprinkling could be limited to that side. Anderson, who had been the foreman of the factory where Bonnette's sprinklers were manufactured, appropriated this conception, *doubled the concave wings, and doubled the holes for delivering the water, and so arranged a sprinkler that two holes on one side delivered water into two concave wings of the four at a time, and secured exactly the same result as Bonnette, with one hole and two wings. It seems clear to us that Anderson took the principle of Bonnette's invention, and merely doubled the parts.* In this light it is easy to bring the Anderson sprinkler within the terms of the third Bonnette claim. The Anderson sprinkler has a combination of four wings, with upwardly inclined concaves sides. It has four sharp edges dividing the space below each wing from that below its neighbors. These edges are transversely located in respect to the pivot on which the wings turn, and are equivalent to two webs, m, crossing at right angles, and there are two nozzles located on one side of the pivotal support. *It is well settled that the mere doubling of parts to produce the same result does not prevent infringement, even though it may involve tributary invention.*"

So also in *Standard Caster Co.* v. *Caster Socket Co.*, 113 Fed. 162, decided by the same Court, the division of

one part into two parts was held not to avoid infringement of the patent in suit which was for a track plate for furniture casters. In the opinion, by the late Justice Lurton, it was said (p. 169):

> "Neither the division of the track plate nor the uniting of the socket and track plate into one piece operate, when in use, to vary the 'peculiar curved form' of the track plate of the patent, and the functions dependent on this form are precisely the shoe functions of the infringing device when the caster is removed. We are impressed with the belief that this division of one part and uniting of two others has been done solely for the purpose of escaping infringement. Narrow as the Berkey and Fox patent is, we cannot ignore the fact that, if such merely colorable modifications are to be sanctioned, the very essence of the patented device will have been appropriated. It is not broadly patentable to make in one part, without change of function, an article originally made in two or more mechanically attached. The converse of this is equally true. Infringement cannot ordinarily be escaped by merely cutting in two a device made in one piece, or by making integral an article formerly made in two. Bundy Mfg. Co. *v.* Detroit Time-Register Co., 36 C. C. A. 375, 94 Fed. 524. To escape infringement some special facts must appear to show that the change is not merely colorable."

As was held by this Court in *Sanitary Refrigerator Co.* v. *Winters et al.*, 280 U. S. 30, 41, 42:

> "There is a substantial identity, constituting infringement, where a device is a copy of the thing described by the patentee, 'either without variation, or with such variations as are consistent with its being in substance the same thing.' *Burr* v. *Duryee,* 1 Wall. 531, 573. Except where form is of the essence of the invention, it has little weight in the decision of such an issue; and, generally speaking, one device is an infringement of another 'if it performs substantially the same function in substantially the same way to obtain the same result. * * * Authorities concur

that the substantial equivalent of a thing, in the sense of the patent law, is the same as the thing itself; so that if two devices do the same work in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form, or shape.' *Machine Co.* v. *Murphy,* 97 U. S. 120, 125. And see *Elizabeth* v. *Pavement Co.,* 97 U. S. 126, 137. That mere colorable departures from the patented device do not avoid infringement, see *McCormick* v. *Talcott,* 20 How. 402, 405. A close copy which seeks to use the substance of the invention, and, although showing some change in form and position, uses substantially the same devices, performing precisely the same offices with no change in principle, constitutes an infringement. *Ives* v. *Hamilton,* 92 U. S. 426, 430. And even where, in view of the state of the art, the invention must be restricted to the form shown and described by the patentee and cannot be extended to embrace a new form which is a substantial departure therefrom, it is nevertheless infringed by a device in which there is no substantial departure from the description in the patent, but a mere colorable departure therefrom. Compare *Duff* v. *Sterling Pump Co.,* 107 U. S. 636, 639."

In the well known case of *Winans* v. *Denmead,* 15 How. 330, this Court, upholding a claim which covered a railroad car made of sheet iron "in the form of the frustum of a cone" against an infringer which had used a different geometric form (an octagon) without introducing any new mechanical principal or mode of operation, and obtaining no new result, said (p. 343):

"Undoubtedly, there may be cases in which the letters-patent do include only the particular form described and claimed. *Davis* v. *Palmer,* 2 Brock 309, seems to have been one of those cases. But they are in entire accordance with what is above stated.

"The reason why such a patent covers only one geometrical form, is not that the patentee has described and claimed that form only; it is because that

form only is capable of embodying his invention; and, consequently, if the form is not copied, the invention is not used.

"Where form and substance are inseparable, it is enough to look at the form only. Where they are separable; where the whole substance of the invention may be copied in a different form, it is the duty of courts and juries to look through the form for the substance of the invention—for that which entitled the inventor to his patent, and which the patent was designed to secure; where that is found, there is an infringement; and it is not a defence, that it is embodied in a form not described, and in terms claimed by the patentee.

"Patentees sometimes add to their claims an express declaration to the effect that the claim extends to the thing patented, however its form or proportions may be varied. But this is unnecessary. The law so interprets the claim without the addition of these words. The exclusive right to the thing patented is not secured, if the public are at liberty to make substantial copies of it, varying its form or proportions. And, therefore, the patentee, having described his invention, and shown its principles, and claimed it in that form which most perfectly embodies it, is, in contemplation of law, deemed to claim every form in which his invention may be copied, unless he manifests an intention to disclaim some of those forms."

And later, in the equally well known case of *Machine Co.* v. *Murphy*, 97 U. S. 120, this Court said (p. 125):

"Except where form is of the essence of the invention, it has but little weight in the decision of such an issue, the correct rule being that, in determining the question of infringement, the court or jury, as the case may be, are not to judge about similarities or differences by the names of things, but are to look at the machines or their several devices or elements in the light of what they do, or what office or function they perform, and how they perform it, and to find

that one thing is substantially the same as another, if it performs substantially the same function in substantially the same way to obtain the same result, always bearing in mind that devices in a patented machine are different in the sense of the patent law when they perform different functions or in a different way, or produce a substantially different result.

"Nor is it safe to give much heed to the fact that the corresponding device in two machines organized to accomplish the same result is different in shape or form the one from the other, as it is necessary in every such investigation to look at the mode of operation or the way the device works, and at the result, as well as at the means by which the result is attained."

As was said in the *Paper Bag Patent Case,* 210 U. S. 405, 418-419:

"An inventor must describe what he conceives to be the best mode, but he is not confined to that. If this were not so most patents would be of little worth. 'The principle of the invention is a unit, and invariably the modes of its embodiment in a concrete invention may be numerous and in appearance very different from each other.' Robinson on Patents, Sec. 485."

Decreasing or impairing efficiency does not avoid infringement:

Recognizing, we think, that it could not expect to succeed on the ground of non-infringment, petitioner paid very little attention to that alleged defence in either of the courts below. In those courts petitioner did not discuss the findings of the Court of Appeals for the Second Circuit in the *Hawley* case nor was any attempt made to justify the grounds upon which that decision was based. It will be noted, also, that in its brief in this Court petitioner does not contend that its blade is not an infringement because of any difference in the shape or

location of the central opening or of the corner notches in its blade. Nor, as we have pointed out earlier, does petitioner contend that the claims in suit do not read word for word on petitioner's blade, nor that petitioners blade does not perform the functions or have the mode of operation specified in the claims. The uncontroverted testimony of respondent's production engineer, Smith, is that petitioner's blade functions in the Goodwill razor exactly the same as the blade of the Gaisman patent functions in the razor there illustrated. Smith testified (R. 49):

> "Q. 26. With the defendant's blade used in this Goodwill razor, how does this compare with the Gaisman patent in so far as the functioning of the blade is concerned in positioning the cap and the guard?
> "A. *Just the same*".

There is nothing whatsoever in the record upon which petitioner could base a denial, that its blade, which differs only immaterially from the blade illustrated in the patent, functions differently from the latter. Although petitioner called an expert witness, Hochman (R. 52), petitioner confined his examination to the prior art without touching at all on the matter of infringement.

In cross-examination of respondent's expert, Professor Norton of the Massachusetts Institute of Technology, petitioner brought out that its blade has what Professor Norton referred to as a loose fit on the guard of the Goodwill razor (R. 67). No point was made of this at the argument in the District Court, and in its brief in the Court of Appeals petitioner stated merely that its blade "*fits loosely* in the plaintiff's Goodwill razor". However, in its brief in this Court, petitioner goes so far as to contend that its blade does not infringe for this reason (Brief, p. 19).

We are unable to see how this can aid petitioner. The only effect of increasing the size of the two end por-

tions of the central opening in petitioner's blade is to cause the blade to be positioned a little less accurately than if smaller clearances were used. Decreasing or impairing efficiency does not avoid infringement.

As observed by the late Chief Justice Taft under similar circumstances in *King Ax Co.* v. *Hubbard,* 97 Fed. 795, 803:

> "This is an instance, not infrequent in patent litigation, where the infringer has sought to evade the claims of a patent, the substance of which he is appropriating, by deliberately impairing the function of one element, without destroying the substantial identity of structure, operation, and result."

And, this Court said in *Winans* v. *Denmead,* 15 How. 330, 344:

> "It is not necessary that the defendant's cars should employ the plaintiff's invention to as good advantage as he employed it, or that the result should be precisely the same in degree. It must be the same in kind, and effected by the employment of his mode of operation in substance."

So also in *Sewall* v. *Jones,* 91 U. S. 171, it was said (p. 184):

> "When a party has invented some mode of carrying into effect a law of natural science or a rule of practice, it is the application of that law or rule which constitutes the peculiar feature of the invention. He is entitled to protect himself from all other modes of making the same application; and every question of infringement will present the question, whether the different mode, be it better or worse, is in substance an application of the same principle."

Petitioner refers to the statement in the Gaisman patent to the effect that the guard projection 1b is "adapted snugly to receive the metal at the sides of opening 2a"

in the blade (R. 121, line 108 to R. 122, line 2), and draws the unreasoned conclusion that its blade does not infringe. Why the patent should be limited to a snug fit, petitioner does not state. There is, of course, no such limitation in the claims or any reason so far as the prior art is concerned why the claims should be so narrowly construed.

Whether the fit of petitioner's blade on the guard of the Goodwill razor is relatively snug or loose, the controlling fact is that the blade is positioned at least 40% more accurately in the Goodwill razor than in the old style Gillette because and only because it embodies the Gaisman principle and has its mode of operation. Petitioner has, therefore, profited from the use of the Gaisman invention in just as great a proportion as if petitioner had made its blade fit the Goodwill guard more accurately.

The figures as to the fit of petitioner's blade, recited on page 19 of petitioner's brief, do not appear in the record, and actual measurements of the devices themselves disclose that the effective clearance is less than half the figure given by petitioner. And they also show that petitioner has compensated to some extent at least for the larger clearance between the central opening in the blade and the guard projections by reducing the clearance between the corner openings in the blade and the cap projections.

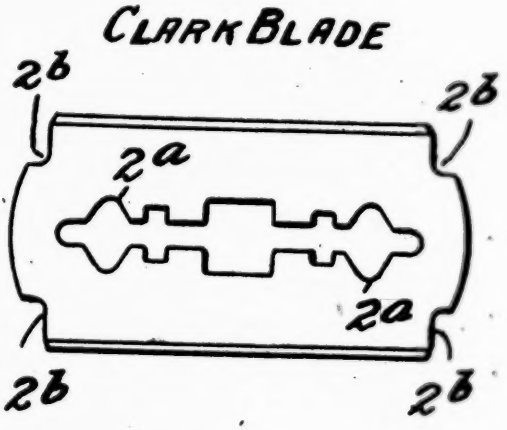
Petitioner's blade embodies the structure and employs the mode of operation specified in the claims in suit, and it does not avoid infringement merely because petitioner has for obvious reasons contented itself with a less satisfactory result than the invention is capable of providing.

POINT II.

The decision in the Hawley case is unsound.

The opinion of the Circuit Court of Appeals in *Gillette Safety Razor Company* v. *Hawley Hardware Company*, 64 F. (2d) 10, occupies barely more than a page in the reports and deals very summarily with the question presented.

In that case claim 1 of the patent here in suit was held not to be infringed by the so-called "Clark" blade which was sold to be used in the same 'Goodwill' razor in which the petitioner's blade is used. That Clark blade was of the following form:



The projections on the guard of the Goodwill razor entered the end enlargements 2a of the central opening of the Clark blade, just as in the present case.

The District Court had held that the Clark blade had "a noncircular opening in the form of a slot which is centrally disposed in the blade in the respect that it is located in the longitudinal axis of the blade • • • The Gillette good will razor has two diamond-shaped

projections on its guard which fit into the centrally disposed noncircular slot in the Clark Ace blade and thereby retain the blade in shaving relation to the guard member" (60 F. (2d) 1019, 1028-9). The Second Circuit Court of Appeals, however, mistakenly regarded the square part at the middle of the opening in the Clark blade as the only part to be taken into account, though why the other portions of the opening should be disregarded is not stated. The court held (64 F. (2d) 10):

> "It was apparent upon a mere examination that the appellant's blade is not 'a blade having a noncircular opening substantially centrally disposed to retain the blade in shaving relation to a guard member.' The drawings of this patent as well as the specifications show a diamond-shaped opening in the blade designed to fit snugly on the projection. The functions of the projection and the opening are explained in the specifications. The projection is provided on the blade side of the guard member adapted to enter an opening in the blade. By preference, the patentee says, he makes the blade [opening] noncircular in shape, preferably having straight sides, the opening in the drawing being shown in the diamond shape and the projection is of noncircular shape adapted to receive the metal at the sides of the opening so that the blade will be retained by said projection upon the guard member with its cutting edges in shaving relation to the guard teeth when the parts are assembled. In the appellants's blade, although there is a noncircular opening substantially centrally disposed, the opening does not fit snugly upon any projection or stud in the guard or on any other part of the razor frame, and cannot perform the function of positioning the blade with respect to the guard which is performed by the diamond shaped opening in the patentee's blade which fits snugly upon the diamond shaped projection in the razor. *There is not a noncircular centrally disposed opening in the appellant's blade retaining the blade in any relation whatsoever to the guard member.*"

Certainly the court was in error in entirely overlooking the two enlarged ends of the opening in the Clark blade and their cooperation with the projections on the guard. The court gave no reason whatever for limiting the claims of the patent to a central opening of the precise form and size illustrated in the patent. The court does not seem to have understood the structure with which it was dealing.

We have earlier pointed out that petitioner made no attempt in the courts below to defend this *Hawley* decision. Petitioner knew and still knows that it is indefensible. This is clearly shown by the twist petitioner has tried to give the opinion in its brief in this Court, hoping thereby to gain some support for the contention that its blade does not infringe because of its less accurate fit. The brief states page 20: "The Court in that case was unable to find Gaisman's snug fit when defendant's blade was placed in respondent's razor" and then quotes the latter part of the above quotation from the opinion. When the last two sentences of that quotation are read in light of the fact that the court was erroneously referring to the square part at the middle of the opening of the Clark blade as the only part to be taken into account, it is apparent at once that the court's reference to the absence of a snug fit is meaningless—the square part of the opening fits nothing. Therefore, if any meaning is to be given to this part of the opinion it must be found in the last sentence in which it is stated that the opening in the Clark blade does not retain the blade "in *any relation whatsoever* to the guard member". This can only refer to the square part at the middle of the opening and shows conclusively that the court misunderstood the structure and that petitioner misconstrues the opinion.

It is also significant that petitioner stated in its brief in support of the petition (p. 10), not merely that both its own blade and the Clark blade "*fit* plaintiff's Goodwill razor," but also that "the Clark blade is a better

infringement than petitioner's because it fits the Goodwill razor *with greater accuracy.*"

The lack of understanding of the Second Circuit Court of Appeals is further and even more definitely indicated by what was stated as to the second element of the claim, to which part of the opinion petitioner does not refer at all. It is the following (*ibid,* p. 11):

> "The appellant's blade does not embody the structure nor perform the function specified in claim 1 which reads: 'Said blade having means spaced from said opening to cooperate with a clamping member to retain the latter in shaving relation to the blade independent of the guard member.' Claim 1, referring to the clamping member, calls for a backing member. The contention is that the notches in the Gaisman blade are 'the means spaced from said opening to cooperate with the clamping member to retain the latter in shaving relation to the blade independent of the guard members,' and that the corner [s] of the appellant's blades are the same as the notches of the appellee's. We do not think that in the patentee's device the notches do perform the function called for in the second clause of claim 1. The claim may not be altered to change its plain meaning so as to increase or give breadth to it."

We cannot understand what the court meant by stating that "We do not think that in the *patentee's* device the notches do perform the function called for in the second clause of claim 1," namely, to cooperate with the clamping member, or cap, to retain it in shaving relation to the blade independent of the guard member. No one has ever denied that they *do* perform that function, or urged that they do not. And no one has ever urged that the notches at the corners of the Clark blade, and at the corners of petitioner's blade, do not perform that function.

There can be no question that the corner openings in the Clark blade do perform the precise function stated in Gaisman's claim, namely, that of retaining the cap in shaving relation to the blade, which is accomplished en-

tirely independently of the guard, as the claim states. The only engagement of the cap with any part of the razor is the engagement of the four cap projections 6 with the four corner openings 2b in the blade. Therefore, necessarily the corner openings in the blade, which are the only engaging means, are responsible for retaining the cap in shaving relation to the blade. *Indeed, they accomplish this so effectively that the present petitioner, as we have seen, has contended that the Clark blade is a better embodiment of the invention than is petitioner's blade.*

The District Court, in the *Hawley* case, correctly understood the structure. It said (60 F. (2d) 1019, 1029) that the Clark blade has—

> "'means' (the notches or recesses in the four corners of the blade) 'spaced from said opening,' and these notches 'cooperate with a clamping member (the cap) to retain the latter in shaving relation to the blade independent of the guard member,' as may be readily seen by mounting the blade on the cap of a good will razor, Plaintiff's Exhibit 4. An inspection of the good will razor with a Clark Ace blade mounted thereon clearly discloses the fact that the blade forms the connecting link between the cap and the guard member, which otherwise are free to move both longitudinally and laterally with respect to each other."

The functions of the central opening and of the notches in the patentee's blade and in petitioner's blade (the latter being substantially the same as the Clark blade) are described at pages 6 to 9, *supra*.

POINT III.

The law applied in the Canadian case is not our law.

Petitioner cited in both of the courts below, and cites here (Brief, p. 23), the decision of the Supreme Court of Canada in *Gillette Safety Razor of Canada, Ltd.* v. *Pal Blade Corporation Ltd. et al.*, 1933 S. C. R. 142, which involved the Gaisman Canadian patent corresponding to the patent here in suit. In that case the appellate court held claims 4 and 5 of the Canadian patent, which are the same respectively as claims 1 and 2 of the United States patent, not infringed by the blade illustrated on the next page. Although petitioner's brief, page 25, gives the opposite impression, the appellate court did not hold the claims invalid as did the trial court.

In finding that the present petitioner's blade infringed the claims here in suit, both of the courts below necessarily disapproved and refused to follow the Canadian decision, the same as they disapproved and refused to follow the decision of the Court of Appeals for the Second Circuit in the *Hawley* case. The opinion of the court below in the present case states (R. 245):

> "Lest it should appear we have overlooked it, we mention the Canadian decision, which we have duly considered before arriving at our conclusion."

The decision of the lower or Exchequer Court of Canada in the same Canadian case was also relied upon by the defendant in the District Court in the *Hawley* case, and was considered by Judge Thomas who, disagreeing with it, refused to follow it or "surrender my own judgment" to that of the Canadian Court (60 F. (2d) 1019, 1028).[1]

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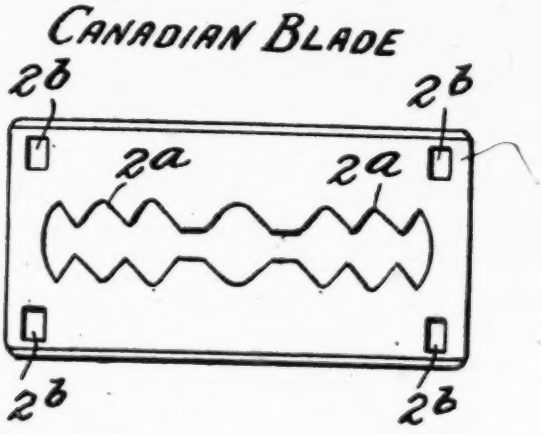
[1] The decision of the Supreme Court of Canada on the appeal had not been rendered at that time.

Likewise on the Canadian appeal the Supreme Court of Canada refused to follow Judge Thomas' decision, stating among other things that "the law to be applied" in the two countries was "not the same".[1]

Examination of the opinion of the Supreme Court of Canada at once discloses that the law as applied by that court in reaching its conclusion of non-infringement is so different from the law applicable here as fully to reconcile the opposite conclusions reached by the Canadian court and the court below.

The blade involved in the Canadian case was constructed as here illustrated.



In this blade the diamond-shape portions 2a of the central opening fit over the two diamond-shape projections 1b of the guard of the Goodwill razor, to position the blade with respect to the guard, and the four rectangular openings 2b, adjacent the corners of the blade, fit over the projections 6 on the cap of the Goodwill razor to position the cap with respect to the blade. The blade, therefore, acts as a key to position all the parts of the razor, in accordance with the Gaisman principle, and

[1] The decision on appeal in the *Hawley* case had not been rendered at that time.

utilizes the same mode of operation and attains the same result as the blade disclosed in the patent in suit.

Notwithstanding the above facts, the Canadian court concluded as follows (*ibid.*, p. 153):

> "The respondent's blade does not correspond to the blade described in the specification and in the drawings. There was no infringement. Of course, the appellant urges the respondent's blade is substantially similar to the blade used in the Goodwill type of razors. The answer is that the Goodwill blade is not the article disclosed in the patent."

That is, the Canadian court held that the defendant's blade did not infringe because its perforations were not identical in form and location with the perforations of the blade shown in the Gaisman patent. *The Canadian court permitted the defendant to appropriate the substance of Gaisman's invention by making immaterial and merely colorable changes in the form of its embodiment.*

Because Gaisman discovered and applied an entirely new principle in the safety razor art, which all others had failed to discover although safety razors had been in use for about twenty years, he was in a real sense a pioneer. But whether or not his invention be classified as pioneer or improvement, he is unquestionably entitled under our law to a reasonable if not a liberal construction of his patent.

As stated by this Court, in sustaining the Eibel patent, in the case of *Eibel Process Co.* v. *Minnesota & Ontario Paper Co.*, 261 U. S. 45, 63:

> "His was not a pioneer patent, creating a new art; but a patent which is only an improvement on an old machine may be very meritorious and entitled to liberal treatment. Indeed, when one notes the crude working of machines of famous pioneer inventions and discoveries, and compares them with the modern machines and processes exemplifying the principle of the pioneer discovery, one hesitates in the division

> of credit between the original inventor and the improvers; and certainly finds no reason to withhold from the really meritorious improver, the application of the rule *'ut res magis valeat quam pereat,'* which has been sustained in so many cases in this Court. *Winans* v. *Denmead,* 15 How. 338, 341; *Corning* v. *Burden,* 15 How. 265, 269; *Turrill* v. *Railroad Co.,* 1 Wall. 491, 510; *Rubber Co.* v. *Goodyear,* 9 Wall. 788, 795; *McClain* v. *Ortmayer,* 141 U. S. 419, 425."

The Supreme Court of Canada did not apply these principles of law but on the contrary very narrowly construed the Gaisman Canadian patent, holding (*ibid,* pp. 150, 151) that the patentable subject matter—

> "lies in the particular mechanical mode by which the alleged invention is carried into operation (*Tweedale* v. *Ashworth,* 1892, 9 R. P. C. 121). And the words of Lord Watson in that case are very pertinent (p. 128):
>
> > 'The plain object of the invention as described in the specification is to substitute better mechanical equivalents for those already known and used as a means to the same end. *It follows that, in construing the appellant's specification, the doctrine of mechanical equivalents must be left out of view. He cannot bring within the scope of his invention any mechanical equivalent which he has not specifically described and claimed.*'"

Such is not the law in this country. Here the doctrine of mechanical equivalent is never "left out of view" whether the invention be primary or secondary. Regardless of any question of "pioneership", United States patents are given an appropriate range of equivalents and are infringed by their obvious mechanical equivalents, *Paper Bag Patent Case,* 210 U. S. 405, 410.

The Canadian court also applied another rule of narrow construction to the claims of the Gaisman Canadian patent, based upon the fact that they are subcombination or

subordinate claims covering the blade rather than the complete razor. The opinion states (*ibid*, pp. 148, 149):

> "In dealing with these claims, one must remember that they have reference only to the blade. They have nothing to do with the combination of blade, guard and cap covered by the subsequent claims and which is the true subject-matter of the patent. For the purpose of construing the claims, we must assume that the holder is neglected, and the blade must be envisaged, not as an element of the combination, but as a separate article independent of the other component parts of the razor. And the question must be: Is that blade standing alone as described a good and valid subject-matter of a patent?
>
> "In that view and as presented in the specification, the blade would be an appendant or subordinate invention, which the patentee has chosen to claim in addition to the main or principal invention consisting in the complete safety razor.
>
> "In such a case, the patentee must describe with particluar distinctness the alleged new element for which he asks special protection. He must make plain the metes and bounds of the subsidiary invention and he will be held strictly to the thing in which (to borrow the words of s. 14 of the Act) he has claimed 'an exclusive property and privilege.' (*Ingersoll Sergeant Drill Co.* v. *Consolidated Pneumatic Tool Co. Ltd.* (1).)"

There, also, is no counterpart in our law for this rule of strict construction based upon a distinction between subcombination claims for parts of a machine and claims for the machine as a whole.

In the well-known case of *Deering* v. *Winona Harvester Works*, 155 U. S. 286, this Court sustained such a subcombination or subordinate claim, saying (p. 302):

> "Defendants further insist that the twentieth claim of this patent is invalid, by reason of the fact that, if the board d^1 be construed, as it evidently must, as a board pivoted to the butt-adjuster, the combination is incomplete and inoperative, because the means by

which it is held and controlled are not stated in the claim; and if the additional elements, namely, the arms d^2, d^3, and d^4, be read into it, it becomes the same as the twenty-first claim, and the novelty of the claim must be made to depend upon the peculiarities of the board d^1. Admitting that additional elements are necessary to render the device operative, it does not necessarily follow that the omission of these elements invalidates the claim, or that the precise elements described in the patent as rendering it operative must be read into the claim. If Steward were in fact the first to invent the pivotal extension to a butt-adjuster, he is entitled to a patent therefor, though the infringer may make use of other means than those employed by him to operate it. *Loom Company* v. *Higgins*, 105 U. S. 580, 584. In such case any appropriate means for making it operative will be understood. Otherwise the infringer might take the most important part of a new invention and, by changing the method of adapting it to the machine to which it is an improvement, avoid the charge of infringement. The invention of a needle with the eye near the point is the basis of all the sewing machines used; but the methods of operating such a needle are many, and if Howe had been obliged to make his own method a part of every claim in which the needle was an element, his patent would have been practically worthless.[1] We think it sufficiently appears that Steward was the inventor of the pivoted extension described in the twentieth claim; that the claim is valid, and was infringed by the defendants."[2]

As in Howe's sewing machine patent the "eye-pointed needle" was claimed separately because it was the outstanding feature or element of the whole machine, here also the blade was the outstanding feature of the Gaisman

[1] Howe's claim was as follows: "A grooved and eye-pointed needle, constructed and adapted for rapid machine sewing, substantially as described" (*Howe* v. *Williams*, Fed. Cas. No. 6,778).

[2] Other authorities to the same effect are: Robinson on Patents, Vol. II, p. 146; *Railroad Co.* v. *Dubois*, 12 Wall,

razor and was, therefore, claimed separately in the claims in suit. As found by the court below (R. 244):

> "• • • the hitherto passive, flexible blade of the old Gillette razor became the *dominant* factor which mechanically determined the initial and safe position of the cutting edge and mechanically held it in that safe and efficient position, rigidly and without variance or shadow of turning."

The blade was both figuratively and functionally the key to Gaisman's invention. The necessity of claiming it separately in order to protect the invention, as shown by the above quotation from the decision of this Court in the *Deering* case, is well illustrated by the present case where the defendant does not make razors but makes only the infringing blade. Petitioner itself takes the position (Brief, p. 22) that, were the claims of the patent confined to claims for the razor as a whole, petitioner would go free under the doctrine of *Wilson* v. *Simpson*, 9 How. 109, because the lower Federal courts have held under the doctrine of that case that one who sells a replacement blade for use in a patented safety razor, in which the blade is only one of the elements of the patented combination, is not a contributory infringer. The Court of Appeals

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47, 60; *Clark Blade & Razor Co.* v. *Gillette Safety Razor Co.* (C. C. A. 3), 194 Fed. 421, 423; *Thomson-Houston Elec. Co.* v. *Black River Traction Co.* (C. C. A. 2), 135 Fed. 759, 763-4; *Hancock Inspirator Co.* v. *Jenks* (C. C., E. D. Mich.), 21 Fed. 911, 915-16; *Rapid Service Store Ry. Co.* v. *Taylor et al.* (C. C., E. D. Mich.), 43 Fed. 249, 251-2; *Roberts* v. *H. P. Nail Co.* (C. C., N. D. Ohio, E. D.), 53 Fed. 916, 920-1; *Holloway* v. *Dow et al.* (C. C., D. Ind.), 54 Fed. 511, 516; *Chambers-Bering-Quinlan Co.* v. *Faries* (C. C., S. D. Ill.), 75 Fed. 662, 663-4; *Kenney Mfg. Co.* v. *J. L. Mott Iron Works* (C. C., S. D. N. Y.), 137 Fed. 431, 432; *National Malleable Casting Co.* v. *American Steel Foundries* (C. C., D. N. J.), 182 Fed. 626, 638-9; *Wright Co.* v. *Herring-Curtiss Co. et al.* (D. C., W. D. N. Y.), 204 Fed. 597, 607-8.

for the Second Circuit so held in the *Hawley* case (64 F. (2d) 10, 11), where the defendant, which sold only blades, was also charged with contributory infringement of Gaisman's claim 3, not here in suit, which claims in combination all three parts of the razor, namely, the cap, guard and blade.

Because of the rules of strict construction, applied by the Canadian court under the law of Canada, which rules have no application here, the Canadian decision should be disregarded as it was by the court below after due consideration.

POINT IV.

The scope of Gaisman's claims is not narrowed by the prior art and the claims are valid.

The claims in suit of the Gaisman patent, originally numbered 4 and 5, were allowed as filed by the Patent Office Examiner, who was unable to find any prior art which is pertinent to them (File History, R. 205). Nor has anyone else succeeded in doing so.

The prior art does not contain the slightest suggestion of Gaisman's invention. When one has considered and understood how the parts of the original Gillette razor were positioned, as taught by Gillette in his original patent No. 775,134 (R. 138) and previously explained herein, *supra* pages 4, 5, one is in precisely the position of Gaisman when he made his invention. The later issued patents, relied upon by petitioner, add absolutely nothing to the disclosure of the original Gillette patent that is pertinent to the Gaisman invention.

Gillette filed the application for his invention in 1901 (R. 138). The originality of his conception lay, as held in 1912 in *Clark Blade & Razor Co.* v. *Gillette Savety Razor Co.*, 194 Fed. 421, in "a ribbon or wafer razor-blade,

so thin as to require external support of its cutting edge" (R. 232).[1] As Gillette stated in his patent (R. 139, lines 37 to 49):

> "Thus the material from which my blades are made need only be just thick enough to take a suitable edge, so that the blades require but a small amount of material and can be ground very quickly and easily, and hence I am able to produce and sell my blades so cheaply that the user may buy them in quantities and throw them away when dull without making the expense thus incurred as great as that of keeping the prior blades sharp, and, moreover, will always have the cutting edge of his razor-blade in the same perfect condition as that of a new blade."

Gillette's invention was, therefore, primarily concerned with a razor blade which was so economical to make that it was cheaper to buy new blades than sharpen old ones. For positioning the blade in the razor the best scheme, that occurred to Gillette or those engaged in the manufacture of such razors until Gaisman made his invention over twenty years later, was that used in the well-known commercial Gillette razor. That razor, as heretofore explained (*supra*, p. 5), employed merely the two pins projecting from the cap which pass through holes in the blade and into holes in the guard for positioning all three of the razor parts.

No one will deny that Gillette's invention was an outstanding invention but, like most such inventions, it did not close the door to future invention in this art. Experience in many arts constantly refutes the assertion that there is no longer room for future invention. (*Eibel Process Co.* v. *Minnesota & Ontario Paper Co.*, 261 U. S. 45, 63; quoted *supra*, p. 36).

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[1] Gillette's sustained claim was as follows (R. 141):

> "As a new article of manufacture, a detachable razor-blade of such thinness and flexibility as to require external support to give rigidity to its cutting edge."

In the present case, as we have seen, the inaccuracy of the positioning of the original Gillette blade was so great as to leave room for the discovery and application of the Gaisman principle by which the accuracy of positioning of the blade was improved as much as 40%. As stated by the court below (R. 232, 233):

> "During the eighteen years that have passed between the year 1904, when the Gillette patent was granted, and 1922, when the problem of a non-face cutting razor was solved, no one solved, or indeed recognized, that problem, although this record is replete with patents many in number, evidencing attempts to improve the safety razor.
>
> "Indeed the only attempt in the line of safety is the patent of Fretwell, No. 1,467,930, considered by this Court in 78 Fed. (2d) 868, the object of which was to provide a blade of such character 'that in the event of an insane person seeking to pick at the blade with a view to removing the same, the blade will be broken into fragments and rendered unfit for use'. But this patent, as also that of Hartman,[1] left no impress on the art and were but abortive conceptions with no factory birth or sales maturity.
>
> *"Curiously enough, the solution of safety came not from the efforts of the Gillette engineering staff in an attempt to extend the monopoly of its expiring patent, but from a competing company."*

Gaisman was the president of the Autostrop Company. He made the invention while connected with that company and assigned his patent to it. The patent was later acquired by the respondent upon merger of the two companies (R. 48).

Petitioner devotes much space in its brief to talk of monopoly, and, among other things, says (p 8):

> "To sustain these claims and hold them infringed by petitioner's blade would be, in effect, to revive

[1] Relied upon by petitioner in the present case.

> respondent's former monopoly in the wafer-type safety razor blade, a monopoly that expired forever with the original Gillette patent. For Gaisman's blade, like Gillette's, is but a two-edged wafer of steel, pierced for mounting within its holder; a blade long since in the public domain and subject to no man's monopoly."

It is probably unnecessary to say that this is neither a frank nor fair statement. The first part of it assumes that "razor blades must fit all extant razors". Petitioner so states on page 22 of its brief, but makes no reference to the record which contains nothing to support the assertion. The contrary is the fact. Petitioner is one of many manufacturers of Gillette type safety razor blades all of whom are free, so far as the patent in suit is concerned, to manufacture and sell blades which will fit every one of the many millions of Gillette type razors which the respondent and others have produced, excepting only the three million and a half Goodwill razors so far sold by respondent which embody Gaisman's invention (*supra*, p. 16). Furthermore, the Gaisman patent has less than eight years before it will expire and petitioner will then also be free to make blades to fit these Goodwill razors. And certainly it is inexact to say that Gaisman's blade is a blade "long since in the public domain" even though petitioner may wish it to be.

Notched and slotted blades, illustrated in other patents which preceded Gaisman, superficially resemble in general appearance Gaisman's blade and also petitioner's blade. But that is all they do. They have no bearing on Gaisman's invention, as we shall show. *Prior to Gaisman no one ever produced a blade embodying Gaisman's new principle which caused the blade to act as a key to position all the parts of a safety razor.*

Petitioner introduced into evidence 12 prior patents but only one of them, Hartman No. 1,247,266 of 1917 (R. 177), which petitioner selected as the best reference, was relied

upon at the trial (R. 28). On appeal petitioner resurrected one other patent, the Ballreich patent No. 1,246,219 of 1917 (R. 171), which was not even mentioned during the trial and no testimony was taken regarding it.[1] Both patents will be considered.

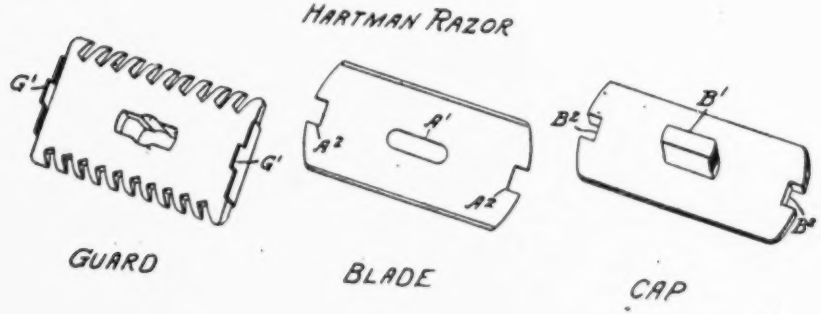
The Hartman Patent:

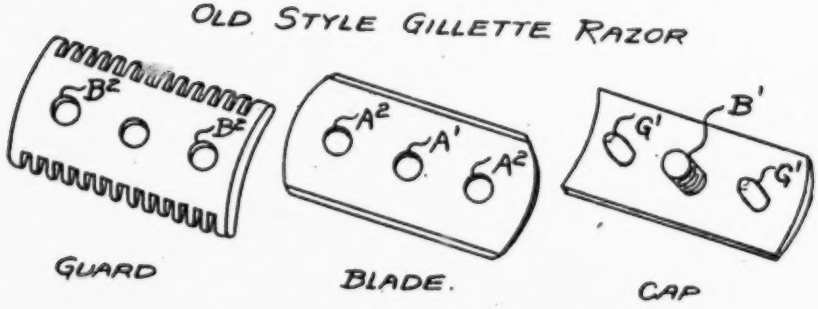
In the District Court, petitioner took the position that the blade of the Hartman patent functions as a key in the razor shown in that patent to position both the guard and the cap with respect to the blade and with respect to each other. In other words, petitioner's contention was that Hartman's blade functions in Hartman's razor as does the blade in the patent in suit. As will appear in a moment, the above assertion is untrue. The Hartman blade is positioned exactly as in the old style Gillette razor. In effect conceding this, petitioner completely abandoned its original contention in presenting the case on appeal and adopted an entirely new but equally unsound position as to the Hartman patent. Only the new position is now advanced. We shall show first that the Hartman blade is positioned as in the old style Gillette razor and will discuss the new argument when taking up the Ballreich patent to which that argument is also applied by petitioner.

Hartman did not have the slightest inkling of Gaisman's invention or of the principle by which Gaisman obtained his more accurate positioning. As appears from Hartman's specifications and drawings (R. 177; see also the large Hartman model, Ex. 11), his object was to provide a ball and socket type of handle for a safety razor which would permit "practically universal adjustment of the handle" to "insure an angling impact of the cutting edge

[1] Under these circumstances petitioner can hardly criticize the court below for not mentioning the Ballreich patent in its opinion (Brief, p. 16).

against the beard", that is, he wished to make it possible for the user to draw the razor across the face at any desired angle. This object is, of course, wholly foreign to that of the patent in suit.





In the above sketches we have illustrated the guard, blade and cap disclosed in the Hartman patent, and also the corresponding parts of the old style Gillette. The reference letters used are those of the Hartman patent. Comparison shows that the only difference between the two razors is that Hartman has placed his positioning pins or projections G^1 on the guard, instead of on the cap where they are in the original Gillette, and has placed in the cap the complementary openings B^2, which receive the pins G^1, instead of in the guard where they are located in the old Gillette. This is, of course, a mere transposition of parts and does not change in any way the method by which the parts of the Hartman razor are positioned or

make it any different from the old method used in the original Gillette. It is an interesting fact that in Gillette's original patent (R. 138), also, the positioning pins or projections 11 were located on the guard, instead of on the cap as they are in the commercial embodiment of the original Gillette.

In Hartman, as in the old style Gillette, the cap is also provided with a screw threaded spindle B^1 whose sole function is to clamp the parts together. The Hartman blade is also provided with the two openings A^2 to receive the guard projections G^1 and an opening A^1 through which the spindle passes. These three holes correspond exactly to the three holes in the old style Gillette blade.

In the District Court, petitioner made the unsound argument—absolutely forbidden by Hartman's own specification and now abandoned—that the parts of the Hartman razor are not positioned as above described, but that the blade is positioned with respect to the guard by the pins G^1 and that it is positioned with respect to the cap by engagement between the sides of the hole A^1 in the blade with the screw threaded spindle B^1. If this were true, then Hartman's spindle B^1 might conceivably be considered as corresponding in function to the projections 6 of Gaisman's cap (Ex. 10, *supra*, p. 6) and Hartman's guard projections G^1, considered as corresponding in function to Gaisman's guard projection 1b, but Hartman's specification shows conclusively that the parts of the Hartman razor are not positioned in any such manner.

The positioning of the parts of the Hartman razor is clearly described in the specification as follows (R. 178, lines 53-67):

> "The blade A *is accurately centered and alined with respect to the holder* and particularly the comb teeth thereof, *by means of springs G* secured as by rivets G^3 to the upper side of the back plate C adjacent the center of the latter, and extending beyond the ends of the latter where they are down-turned. *The down-turned*

end of each spring is formed with a teat or projection G^1 which passes through and snugly engages the side walls of a notch A^2 formed in the corresponding end of the razor blade and are received in notches or recesses B^2 formed in the front plate B of the blade holder."

Thus it clearly appears from the Hartman patent itself that Hartman's guard pins or projection G^1 engage the openings A^2 in the ends of the blade to position the blade with respect to the guard and then project into the openings B^2 in the ends of the cap to position the cap. *All three parts of the razor are, therefore, positioned by the pins G^1 on the guard in exactly the same way as the parts of the old style Gillette are positioned by the two pins G^1 on the cap, the sole difference between the two constructions being that in Hartman the pins G^1 are placed on the guard, as in Gillette's patent, whereas in the commercial embodiment of the old style Gillette they are placed on the cap.*

Hartman's specification further shows that the central opening A^1 in the blade and the screw threaded spindle B^1 have nothing whatsoever to do with the positioning of the blade. They perform exactly the same functions as the central hole A^1 in the blade and the spindle B^1 of the old style Gillette. In both cases the sole purpose of the central hole A^1 in the blade is to permit the spindle B^1 to pass through the blade into the central opening in the guard for the purpose of clamping the parts together. *The spindle and central hole in the blade have no function whatsoever in positioning the blade.* Thus Hartman states in his specifications (R. 177, ll. 86-88):

"The razor blade is formed with a central slot A^1 through which loosely passes the flattened stud B^1."

This is summed up by respondent's expert, Professor Norton of the Massachusetts Institute of Technology, as follows (R. 60, 61):

"The Hartman specification describes the member B^1, the nub that sticks up as passing loosely through the blade and later in the specification states specifically that the blade is accurately centered and aligned with respect to the holder and particularly the comb

teeth thereof by means of springs G secured as by rivets G^3, etc., to the upper side of the back plate. These tongues described as projections pass through and snugly engage the side walls of a notch A^2 formed in the corresponding end of the razor blade and are received in notches or recesses B^2 formed in the front plate B of the blade holder. *They are the means of positioning the blade in terms of both the other members.*

"Q. 5. *And they correspond, as I understand it, although on the opposite part of the razor, with the two outer studs of the old original razor?*

"A. *Yes, sir.*"

The statements on page 13 of petitioner's brief that the central opening in Hartman's blade exists "for the sole purpose of properly locating the blade in the holder" and that it "acts to retain the blade in relation to the cap" are untrue. The central opening in Hartman's blade has nothing whatsoever to do with the positioning of the blade.

The positioning means disclosed in the Hartman patent are, therefore, identical in function and mode of operation with the positioning means employed in the old style Gillette razor. Hartman's disclosure added nothing in this respect to the disclosure of Gillette's original patent No. 775,134 of 1904 (R. 138) in which the three parts of the razor, namely the guard 5, the cap 4 and the blade 2 were positioned by the guard studs 11 which project through the holes 10 in the blade and into the holes 13 in the cap. This is described in Gillette's patent as follows (R. 140, lines 36-47):

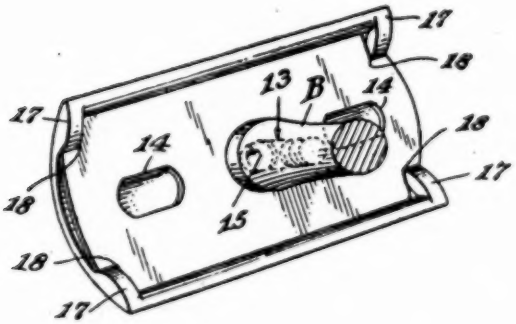
"In order to position the blade with respect to the guard and hold it against lateral movements, said blade may be provided with slots 10, adapted to receive the extended free ends 11 of the posts 9, the plate 8 being similarly slotted to receive the end portions 11 and supported on shoulders 12, formed at the base thereof. I prefer to make the end portions 11 long enough to pass through corresponding slots 13, formed in the backing 4, said backing also being thus positioned with respect to the blade and guard."

The contention which petitioner made in the District Court, based upon the Hartman patent, is, therefore, unsound. It is positively refuted by Hartman's own specification. The parts of the Hartman razor are positioned in exactly the same way as in the old style Gillette. Hartman's blade does not act as a key to position both the guard and the cap with respect to the blade and with respect to each other, which is the distinctive and characteristic feature of the Gaisman patent and produced the 40% greater accuracy in blade positioning.

The Ballreich Patent:

This patent (R. 171), applied for in 1912, was an attempt to avoid Gillette's original patent after that patent had been adjudicated.[1] It does not show a razor of the Gillette type having separate cap, blade and guard.

BALLREICH RAZOR



As appears from the above sketch, Ballreich has a combined cap and guard made in one piece. This combined cap and guard is provided with slits on each side through which the cutting edges of the blade project. The blade is positioned solely by the shoulders 17 which depend below each

[1] The Clark case (*supra*, p. 42) was decided on February 1, 1912 and the Ballreich patent was applied for on March 29 of the same year (R. 171).

corner of the combined cap and guard and enter the cut-outs 18 at the corners of the blade. The razor handle B is screwed onto the spindle 13, which passes through a circular opening 15 in the center of the blade as in the original Gillette. The blade is flexed by screwing the handle directly against the undersurface of the blade.

To avoid the original Gillette patent, Ballreich also specified that his blade should be so thick "as not to require external support to give rigidity to its cutting edge" (R. 171, lines 21-24), the converse of which was the principal feature of Gillette's blade. But Ballreich's blade had to be flexed, in order to get it into the combined cap and guard, so he provided the two openings 14 in the blade. As to this, he says in his specification (R. 171, lines 85-105):

> "This blade is formed from steel of a sufficient thickness so as *not* to require external support to give rigidity to its cutting edge. I attain the desired flexibility of the blade by cutting out a portion of the interior of the material, as indicated by the holes 14, the size and shape of which may be varied, depending on the thickness of the blade used and the degree of flexibility desired. As the greatest degree of flexibility is required to enable the blade to be pressed on the inside of the holder, I find the best results are obtained by cutting away the portions in such a manner as to leave oblong openings with rounded corners on either side of the central opening and substantially midway between the central openings and the ends of the blade. This object may also be attained by thinning the metal of the blade medially parallel with the cutting edges, or in any other suitable manner."

The openings 14 engage nothing and have nothing whatsoever to do with the positioning of the blade. They serve merely to make the blade more flexible and, as stated in the above quotation from the specification, this same object may be attained, without having any such openings at all, merely by thinning the metal of the blade medially.

Clearly, neither the Hartman nor Ballreich patents teach the Gaisman invention. Neither patent discloses a blade embodying Gaisman's new principle by which the blade acted as a key to position the parts of a safety razor and avoided the accumulation of clearance errors.

Petitioner's present position regarding the prior patents:

Recognizing that these prior patents are not pertinent to Gaisman's invention and, when correctly understood, can have no effect on either the scope or validity of the claims in suit, petitioner, in presenting the case on appeal modified the prior patents trying to make them seem pertinent though in fact they are not. Petitioner's new position is entirely inconsistent with the contention made in the District Court that the Hartman blade is positioned, in the only razor shown in the Hartman patent, in accordance with the Gaisman invention.

As the premise for its new argument, petitioner asserts (Brief p. 11) that blades, having the "structure" of Gaisman's blade, are disclosed in the Hartman and Ballreich patents. All that petitioner means by this is that Hartman's blade has the central opening A^1 and the two spaced openings A^2 (*supra*, p. 46) and that Ballreich's blade has the two central openings 14 and the corner cut-outs 18 (*supra*, p. 50).

Petitioner does not state that Hartman's or Ballreich's blade performed the functions or had the mode of operation of the Gaisman invention to which the claims in suit are specifically limited.[1] These claims clearly state, and are limited to, a blade in which the central opening functions or operates *to retain the blade in shaving relation to the guard*, and in which the other positioning means or open-

[1] As pointed out (*supra*, p. 45), that contention was made in the District Court as to Hartman and was abandoned. It was, of course, never made with respect to Ballreich.

ings spaced therefrom *retain the cap in shaving relation to the blade.*

As we have seen, neither the Hartman nor Ballreich blade performed these functions or had this mode of operation, so that, even if they were structurally identical with Gaisman's blade and obviously they are not, they would not anticipate his claims. Not being able to supply this deficiency in the prior art, petitioner has tried to confuse the matter by "inventing" two new razors, in one of which petitioner argues Hartman's blade could be made to perform the functions of Gaisman's blade, and in the other of which petitioner also contends that Ballreich's blade would so function. *These new razors are entirely different from Hartman's and Ballreich's razors, and from anything ever contemplated by either of these prior patentees. These new razors were shown for the first time in two drawings in petitioner's brief on appeal and are repeated at pages 14 and 15 of its brief here. They do not appear in the record and the record contains nothing on which they can be based.*

The introduction of such wholly new matter in this manner cannot be justified and might properly be ignored. There is no proof whatsoever to support petitioner's mere assertion that the prior blades would perform Gaisman's functions in these newly "invented" razors. *But even if it were established by evidence that razors could be made in which blades, similar to those of Hartman and Ballreich, would function as in the Gaisman patent, still such fact would be wholly immaterial as a matter of law and could have no effect on the scope or validity of Gaisman's claims.* It is not at all surprising, if true, that petitioner should be able with complete knowledge of Gaisman's invention to embody that invention in new and specifically different devices by designing such new devices itself or by reconstructing the prior art. Petitioner's proposition, that a patent may be anticipated or its scope limited in this manner, is wholly novel to the law of patents

and, if it were the law, hardly any patent could withstand its application.

The Law:

It is not possible to anticipate the Gaisman invention, or narrow its scope by citing patents showing blades which have some physical resemblance to the patented blade but which were not designed, adapted or used to perform its functions. *Just as for infringement there must be a functional or operative correspondence between the disclosure of the patent and the alleged infringing device, so also for anticipation there must be a functional or operative correspondence between the disclosure of the patent and the prior art.* It is, therefore, well settled that mere physical resemblance to a patented structure is not enough to make out anticipation.

In applying this rule, this Court said in *Consolidated Valve Co.* v. *Crosby Valve Co.*, 113 U. S. 157, 170, 171:

> "In regard to all of the above patents, adduced against Richardson's patent of 1866, it may be generally said, that they never were, in their day, and before the date of that patent, or of Richardson's invention, known or recognized as producing any such result as his apparatus of that patent produces, as above defined. *Likenesses in them, in physical structure, to the apparatus of Richardson, in important particulars, may be pointed out, but it is only as the anatomy of a corpse resembles that of the living being.* • • • Taught by Richardson, and by the use of his apparatus, it is not difficult for skilled mechanics to take the prior structures and so arrange and use them as to produce more or less of the beneficial results first made known by Richadson; but, prior to 1866, though these old patents and their descriptions were accessible, no valve was made producing any such results."

The petitioner also argues (Brief, p. 17) that Gaisman's blade is an old structure which cannot be patented merely because someone has perceived in it a new utility

or, in other words, that the Gaisman patent is merely for a new and unpatentable use of an old device. The rule of law upon which petitioner bases this argument obviously has no application to the present case. The rule which is applicable here is that stated above, namely, that a prior patent, which incidentally shows a similar structure, cannot act as an anticipation where the prior device was not designed, adapted or used to perform the functions of the later patent. The situation here is like that in *Munising Paper Co.* v. *American Sulphite Pulp Co.*, 228 Fed. 700, in which the Circuit Court of Appeals for the Sixth District said (pp. 703, 704):

> "The case of Pierredon is thus not within the rule which gives an inventor the benefit of his complete discovery, although he may not have appreciated or known its full uses, for *he made no discovery so far as cement lining is concerned.* The case falls rather within the rule that prior accidental production of the same thing, when the *character* and *function* were not recognized until the invention of the later patent, does not affect anticipation. Tilghman *v.* Proctor, 102 U. S. 707, 711, 26 L. Ed. 279, Topliff *v.* Topliff, 145 U. S. 156, 161, 12 Sup. Ct. 825, 36 L. Ed. 658; Wickelman *v.* Dick (C. C. A. 2d Cir.) 88 Fed. 264, 266, 31 C. C. A. 530; Canda *v.* Michigan Iron Co. (C. C. A. 6th Cir.) 124 Fed. 486, 492, 61 C. C. A. 194. And that anticipation is not disclosed by a drawing which incidentally shows a similar arrangement of parts, where such arrangement is not essential to the first invention and *was not designed, adapted, and used to perform the function which it performs in the second invention, and where the first patent contains no suggestion of the way in which the result sought is accomplished by the second inventor.* Brill *v.* Third Ave. Railroad Co. (C. C.) 103 Fed. 289; Gray Telephone Co. *v.* Baird Co. (C. C. A. 7th Cir.) 174 Fed 417, 421, 98 C. C. A. 353. We think the defense of anticipation is not made out."

The law is also stated by the Circuit Court of Appeals for the Seventh Circuit in *Gray Telephone Pay Station Co.* v.

Baird Mfg. Co., 174 Fed. 417, which involved the patent for the well-known telephone coin box. The court said (pp. 420, 421):

> "There are several patents in the prior art, which, in a degree at least, might well have been claimed, though unconsciously to their inventors, to have afforded the assistance of the vibration caused by resonant contact of the signal-box with the transmitter-support. The various signaling methods referred to, wherein the sound is conveyed by deflectors or other means for impacting upon the transmitter-diaphragm through the air, would undoubtedly, if so arranged as to permit of vibration, be supplemented directly, if indeed the vibration were not the principal channel of sound conduction to the transmitter, as, for instance, Gray's several patents, Nos. 469,649, 469,650, 462,813, and Root patent, No. 440,118, and Holbrook patent, No. 481,903. Owing to the fact that the signal-box and transmitter-support have a common backboard, even though they be not in actual close contact, there could hardly fail to be some degree of vibration through the limited resonant connection. Granting this to be the case, yet the patentees neither made claim for such a result, nor sought to take advantage thereof, and the record fails to make it apparent that any satisfactory and practical results could have been obtained thereby.
>
> 'A patent for a mechanical combination is not anticipated by a drawing in a prior patent which incidentally shows a similar arrangement of parts, where such arrangement is not essential to the first invention, and was not designed, adapted, or used to perform the function which it performs in the second invention, and where the first patent contains no suggestion of the way in which the result sought is accomplished by the second inventor.' Brill *v.* Third Ave. R. C. (C. C.) 103 Fed. 289."

Another case is *Beckwith* v. *Malleable Iron Range Co.*, 174 Fed. 1001, in which it is stated (p. 1010):

> "Thus it appears that the convex protuberance on defendant's prior structures, the Weiser, Drown, and

Hicks ranges, was simply accidental. It attracted no attention and was considered a matter of no significance until Beckwith made this feature an important element in his combination. The law is well settled that such prior accidental production, when the character and function were not recognized until the patented invention came into being, cannot be relied upon by way of anticipation. Walker on Patents (4th Ed.) 67; Wickelman *v.* Dick Co., 88 Fed. 264, 266, 31 C. C. A. 530; Tilghman *v.* Proctor, 102 U. S. 707, 711, 26 L. Ed. 279; Pittsburgh Reduction Co. *v.* Cowles Co. (C. C.) 55 Fed. 301; Chase *v.* Fillebrown (C. C.) 58 Fed. 377."

In *Canda et al.* v. *Michigan Malleable Iron Co.,* 124 Fed. 486, (C. C. A. 6) the court said (p. 492):

"We have on many occasions said that in such case, if the patent gave reason to suppose that the inventor may probably have contemplated that his device was capable of other uses, and made adequate provision therefor, his invention should be regarded as covering them, whether he mentioned them or not, or whether he contemplated any other particular use or not. For example, in Goshen Sweeper *v.* Bissell Carpet Sweeper Co., *supra,* and Stilwell-Bierce & Smith-Vaile Co. *v.* Eufaula Cotton Oil Co., *supra.* But if the patent gives no sign of such contemplated use, and makes no provision adapting it to other uses, the patentee cannot be said to have invented that for which he has given no specific directions for construction. And such is the necessary deduction from the statutory requirement that the patentee shall give such clear, full, and concise instructions as shall enable any one skilled in the art to make, construct, conform, and use the thing invented. Rev. St. § 4888 [U. S. Comp. St. 1901, p. 3383]. Nor can we think that the existence in the Patent Office of something which might merely supply a hint, but was not specifically described or claimed as intended to be covered by a patent, ought to be held as an anticipation of an otherwise valid invention. Inventors are not precluded by the embryonic and shapeless ideas found in former patents, any more than they are by such undeveloped matter existing elsewhere."

And in the more recent case of *Nelson Mfg. Co.* v. *Myers & Bro. Co.*, 25 F. (2d) 659, 663, the Circuit Court of Appeals for the Sixth Circuit said:

> "And a patent otherwise valid is not void for anticipation because a prior patent covers a device which might be so constructed as to be capable of the same use as that of the later patent, where the prior art gives no suggestion that such use was contemplated, and no specific directions for such construction."

In *Eibel Process Co.* v. *Minnesota & Ontario Paper Co.*, 261 U. S. 45, this Court said (p. 66):

> "It is contended on behalf of the defendant that whether Barrett and Horne perceived the advantage of speeding up the stock to an equality with the wire, yet the necessary effect of their devices was to achieve that result and therefore their machine anticipated Eibel. In the first place we find no evidence that any pitch of the wire, used before Eibel, had brought about such a result as that sought by him, and in the second place if it had done so under unusual conditions, accidental results, not intended and not appreciated, do not constitute anticipation. *Tilghman* v. *Proctor*, 102 U. S. 707, 711; *Pittsburgh Reduction Co.* v. *Cowles Electric Co.*, 55 Fed. 301, 307; *Andrews* v. *Carman*, 13 Blatchf. 307, 323."

It will be apparent to the Court that it is impossible to hold Gaisman's claims to be anticipated without at the same time overturning the well established principle of law set forth in the foregoing cases, the importance of which in the development of our patent system cannot be denied.

Thus it is unimportant whether the structure of Gaisman's blade physically resembles prior structures. Even if he had used a blade of the precise contour shown in either the Hartman or Ballreich patents, because he used it in a new way to produce a new result he would be entitled to a patent thereon. As was said many years ago in *Strong*

et al. v. *Noble et al.*, 6 Blatchford 477, where the patent was for an old knit fabric to cover the handle of a whip:

> "There is scarcely a patent granted that does not involve the application of an old thing to a new use, and that does not, in one sense, fail to involve anything more. But the merit consists in being the first to make the application, and the first to show how it can be made, and the first to show that there is utility in making it."

Also, recently in *Eclipse Machine Co.* v. *J. H. Specialty Mfg. Co.*, 4 F. Supp. 306, 312, it was said:

> "The idea that such change could be successfully made was invention even though means that were simple and *old* should be employed for carrying it out."

And again in *H. K. Regar & Sons, Inc.* v. *Scott & Williams, Inc.*, 63 F. (2nd) 229, 231:

> "When old devices are changed at all, the change may be dictated by a new conception, which it took originality to conceive. *Strictly, the old device is not then put to a new use; the new use begets a new device.* In such cases it requires but little physical change to make an invention. * * *"

All that petitioner has been able to point to in the prior art are blade structures which have some physical resemblance to Gaisman's blade. But as this Court said (*supra*, p. 54), they resemble the patented structure "only as the anatomy of a corpse resembles that of the living being". Petitioner even admits that the prior art had to be "born anew" (Brief, p. 16). Under our law, a meritorious invention cannot be nullified by such citations which do not place the invention in the possession of the public because they do not embody its principles, have its mode of operation, or produce its new results. The unsoundness of petitioner's argument is conclusively shown by the extreme to which petitioner has thought

it necessary to go in devising new razors for the sole purpose of asserting that certain old blade structures could, when placed in a new environment admittedly not contemplated by the prior patentees, be made to function according to Gaisman's invention. If the structure of Gaisman's blade were in fact old, nevertheless the application which he made of it would clearly constitute invention.

The unsoundness of petitioner's position on anticipation is also shown by the manner in which petitioner deals in its brief with the functions which Gaisman's blade was the first to perform. On pages 12 and 13 it is said:

> "Now the chief end and function of a safety razor blade is to shave, and the degree to which it achieves that end and performs that function depends primarily, we should suppose, upon the keenness of its edge and the temper of its steel. The holder doubtless contributes to the result to the extent that it properly supports and directs the blade; *but that, after all, is not the business of the blade.*"

What Gaisman did was to make it the business of the blade to position all the parts of the razor. That unquestionably was new and the fact is not to be obscured by such statements as that just quoted from petitioner's brief.

Petitioner's arguments on lack of invention, also, are not convincing. There are, of course, two aspects to every invention, (1) the idea of an end to be accomplished, and (2) the idea of means by which that end can be attained (Robinson on Patents, Vol. I, p. 132). As stated in *General Electric Co.* v. *Sangamo Electric Co.*, 174 Fed. 246, 251 (C. C. A. 7), "Invention • • • is the double mental act of discerning • • • some deficiency, and pointing out the means of overcoming it."

In most cases the first of these is by far the more important, as has been repeatedly held and is true here. Where the mechanical devices employed are simple, the

courts recognize that the invention resides primarily in the novel thought or underlying idea. As this Court said in *Hobbs* v. *Beach*, 180 U. S. 383, 393, the invention consisted—

> "rather in the idea that such change could be made, than in making the necessary mechanical alterations."

And, in *General Electric Co.* v. *Hartman*, 187 Fed. 131, the Circuit Court of Appeals for the First Circuit, said (p. 133):

> "After a thing of this kind is accomplished, the point of view makes it seem a simple contrivance, but, in dealing with the question of invention, the essential view is from the state of the art existing at the time the necessary problem was sought to be solved."

And, (pp. 135, 136):

> "If a skilled mechanic were given the conception and the idea, it is possible that he might work out a result, but that, it would seem, is not the correct point of view. We must look at the situation as it existed prior to the conception which suggested or promoted the beneficial mechanical arrangement. • • •
>
> "But the mechanical problem of adapting the means is not the inventor's whole case. The question of invention involves a broader problem than that relating to the mechanical means. • • •
>
> "The inventive idea was not so much in the arrangement of mechanical means as in appreciating the difficulties and necessities, and in conceiving and pointing out how to deal favorably and beneficially with the forces involved."

Although the means which Gaisman employed were simple—and necessarily so or they would not have been practical in a safety razor—the idea underlying his invention and the principle involved are not particularly simple or easy to understand, as appears from our description of how

the Gaisman principle works in avoiding the cumulative errors due to clearances (*supra*, p. 13). But even if the invention should seem simple now, that would be unimportant. As was said in *Expanded Metal Co.* v. *Bradford*, 214 U. S. 366, 381:

> "The fact that the invention seems simple after it is made does not determine the question; if this were the rule many of the most beneficial patents would be stricken down."[1]

Furthermore, the Gaisman invention has been commercially successful (*supra*, p. 16), so that any doubt on the question of invention should be resolved in favor of the patentee. *Smith* v. *Snow*, 294 U. S. 1, 14; *The Barbed Wire Case*, 143 U. S. 275, 292; *Diamond Rubber Co.* v. *Consolidated Rubber Tire Co.*, 220 U. S. 428, 442; *Magowan* v. *New York Belting Co.*, 141 U. S. 332, 343.

It is very easy for petitioner to stress the "essential simplicity" of the invention (Brief, p. 10) or even speak of it as merely for a piece of metal with certain holes in it. If that be the right approach, then also Howe's invention was merely for a needle with a certain hole in it. And Gillette's original invention was merely for a thin piece of metal with sharpened edges.

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[1] Other cases are: *Potts* v. *Creager*, 155 U. S. 597, 608; *Regent Mfg. Co.* v. *Penn Elec. Co.*, 121 Fed. 80, 83 (C. C. A. 7); *Faries Mfg. Co.* v. *George W. Brown & Co.*, 121 Fed. 547, 550 (C. C. A. 7); *Dececo Co.* v. *Gilchrist*, 125 Fed. 293, 298 (C. C. A. 1); *Buchanan* v. *Perkins Mfg. Co.*, 135 Fed. 90, 94 (C. C. A. 3); *Barry* v. *Harpoon Castor Mfg. Co.*, 209 Fed. 207 (C. C. A. 2); *Lane* v. *Craftsmen Film Laboratories, Inc.*, 7 F. (2d) 288, 289 (C. C. A. 2); *Traitel* v. *Hungerford*, 18 F. (2d) 66, 68 (C. C. A. 2); *White Co.* v. *Converse & Son*, 20 F. (2d) 311, 313 (C. C. A. 2); *United Shoe Machinery Corp.* v. *E. H. Ferree Co. et al.*, 64 F. (2d) 101, 102-103 (C. C. A. 2); *George Frost Co. et al.* v. *Cohn et al.*, 112 Fed. 1009; *Maunula* v. *Sunell*, 155 Fed. 535, 539; *Van Heusen Collar Cases* 300 Fed. 922, 925.

Nor do we think it adds materially to the argument of non-invention, to indulge in the broad and purely speculative assertion that it is not invention to shape a tool to fit its holder. Indeed, petitioner admits the fallacy of its own contention when it says, in connection with the new razors "invented" for the Hartman and Ballreich blades (Brief, p. 13):

> "Here we have reversed the process earlier referred to and have, so to speak, made the keyhole to fit the key; thereby demonstrating that whether, in Gaisman's mental processes, the diamond-studded holder preceded the diamond-holed blade, or the other way about, the result is the same."

Of course, the conception of the invention was a unitary thing and cannot be so dissected. Gaisman conceived neither a blade nor a razor but a razor *and* blade in which the blade would, acting as a key, position all the parts. Gaisman's razor was novel and so was his blade. He, therefore, had the right to and did claim the blade as a separate part of his invention, properly defining it in terms of its novel combination of positioning means. Had he not done so, "his patent would have been practically worthless" (*Deering* v. *Winona*, 155 U. S. 286, *supra*, p. 39), as we have shown (*supra*, p. 40).

Perhaps petitioner's greatest effort is devoted to attributing Gaisman's invention entirely to his razor. But to do this is no less absurd than to attribute Howe's invention entirely to his sewing machine, while ignoring its most important element, the eye-pointed needle. Contrary to petitioner's assertion (Brief, p. 5), the court below did not overlook the distinction between the blade and the razor as any fair reading of the opinion will disclose.

Conclusion.

There is nothing whatsoever disclosed in the prior art which contains even the slightest suggestion of Gaisman's invention. Therefore, to deny patentability to his claims would be tantamount to holding that when Gillette made his invention in 1901 he closed the door for all time to future invention in this field. Gillette's invention was an outstanding invention but this case shows conclusively that it left room for future invention in this art.

There is nothing which requires that Gaisman's claims be so narrowly construed as to permit petitioner to escape an adjudication of infringement. The court below was right in finding that the Gaisman patent is both valid and infringed.

Respectfully submitted,

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